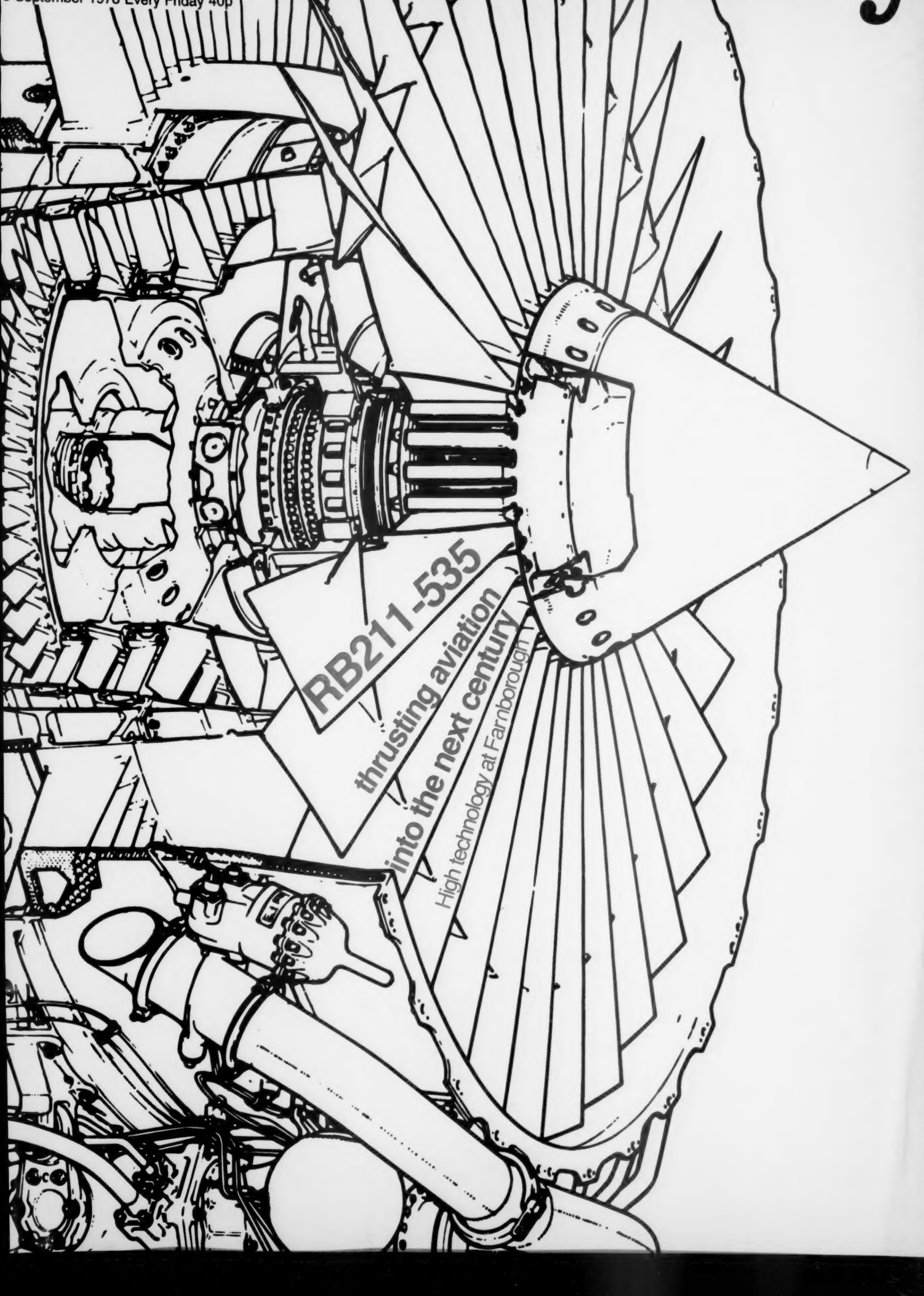
Trade and Industry

8 September 1978 Every Friday 40p



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High technology at Farnborough

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Trade and Industry

8 September 1978

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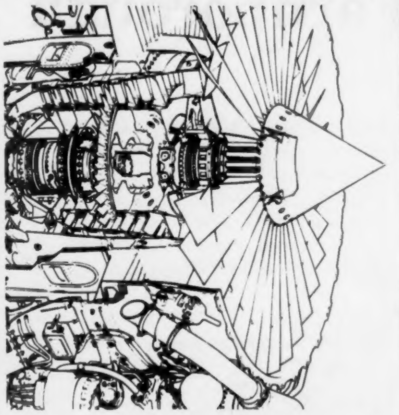

The government has announced support for the development of a new Rolls-Royce aero-engine, RB211-535, to power the Boeing 757, an order for which has been placed by British Airways (page 530). British aerospace achievements on display at the Farnborough show are reviewed on pages 526, 527.

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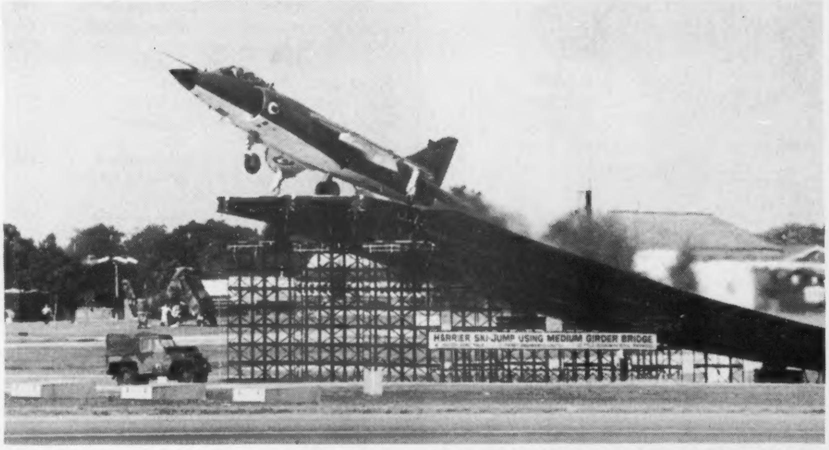
High technology to the fore at Farnborough

The twenty-third aerospace exhibition and flying display held by the Society of British Aerospace Companies at Farnborough this week features a buoyant British Aerospace industry. Provisional export earnings for the first six months of the year are £540 million. This show is significant for the high technological competence of the industry, particularly in the field of aviation electronics.

The industry, represented by the more than 280 members of SBAC, at present employs 191 000 people. Today, for many of them, their livelihood is linked to an increasing number of collaborative programmes with the aerospace industries of other countries. Currently there are 11 collaborative programmes with European countries on aircraft, eight involving aero engines, three involving missiles and seven on satellites.

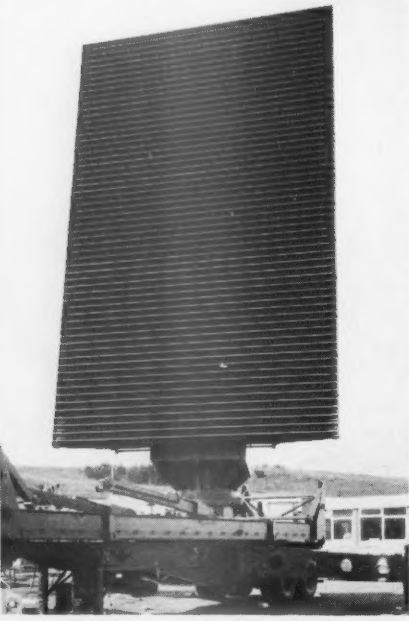


British Aerospace Sea Harrier FRS Mk 1, which made its maiden flight on 20 August, takes off from the revolutionary 'ski-jump' ramp due to be fitted to the 'Invincible' class command cruisers.

High technology was most in evidence at Farnborough in the comprehensive range of airborne and ground control, navigation and radar equipment. Current developments are marked by sophistication, compactness, low cost and reliability – indicative of the impact made by state of the art micro-electronics on aviation electronics. It is now possible for a computer to cost less than the plug and socket connecting it to the aircraft.

Unveiled at Farnborough by Marconi Radar Systems Ltd is the Martello mobile L-band military radar with a range in excess of 300 miles. Simultaneous range, bearing and height acquisition is accompanied by high resistance to both jamming and interference coupled with excellent range and bearing discrimination. Rapid deployment is made possible by a complete Martello system being contained in standard 40 foot containers. The system can be operational within six hours.

High resistance to jamming and interference is a feature of Martello, Marconi Radar Systems Ltd's mobile long-range 3-d radar.



On the civil side Plessey Radar Ltd showed the weather radar type 46C, prior to its being installed at Jersey International Airport. Providing all-round weather surveillance, it is intended primarily to give warning of weather hazards which may affect aircraft flying within the Channel Islands control zone. The Plessey 46C is a solid-state electronics system operating in the meteorological C-band to combine good detection performance with good penetration of rain and snow, and an aerial system of reasonable size and weight.

A new area navigation system for civil and military, fixed and rotary-wing aircraft is presented for the first time by Decca Navigation Company Ltd. It consists of a control and display unit and a processor, with data store. The processor keyboard may be used to assemble a route consisting of up to 100 way-points and ground beacons. Navigational data provided include present and way-point positions, bearing and distance to way-points, heading to steer and estimated time of arrival, desired track, actual track and ground speed, altitude, magnetic variation and wind speed and direction.

Making the most of the latest large-scale integrated microelectronic circuit techniques is Smiths Industries Ltd's 5-60 series head-up

METEOSAT - Europe's Geostationary
...logical Satellite

Signals from the European Meteosat weather satellite being converted to coloured tv display on equipment developed by Gresham Lion Ltd.

Plessey weather radar type 46C which has just been ordered for installation this autumn at Jersey International Airport.

flight data display. Currently in production for the Sea Harrier programme, it is one of the first systems to incorporate a combined symbology and raster video display. The Sea Harrier system has one of the most powerful general-purpose airborne computers currently available with an associated 22 000 word memory. An outstanding feature of the 5-60 series is its suitability for other aircraft applications. Already a head-up display is available from Marconi Avionics, for civil aircraft, particularly for the critical take-off and landing stages.

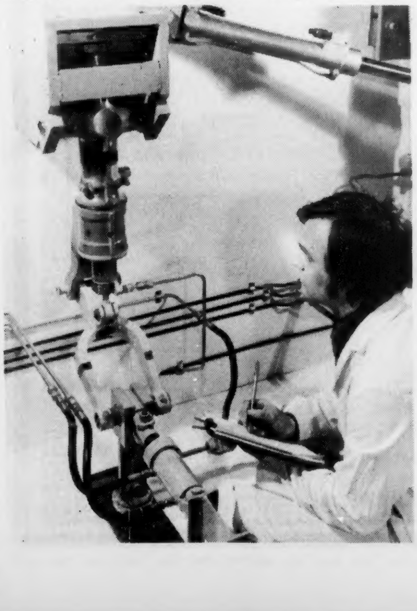
A significant technological advance in propulsion control is exhibited by Lucas Aerospace Ltd in the display of its second generation full authority electronic digital controller, type SDS 200. Developed for current and future civil and military helicopter gas turbines in the 600 to 1000 shp range, it will exercise complete engine management over the entire flight envelope. The system has been tested on several engine types.

A major proportion of the envisaged £1,000 million development costs of a new helicopter, for which Westland Helicopters Ltd has received a design study contract of nearly £10 million from the government, will be accounted for by advanced electronics. Called the WG-34, it will meet the need for a long range military and civil maritime helicopter in the mid to late 1980s. International collaboration on the production of the aircraft is being sought with France, West Germany and Italy.

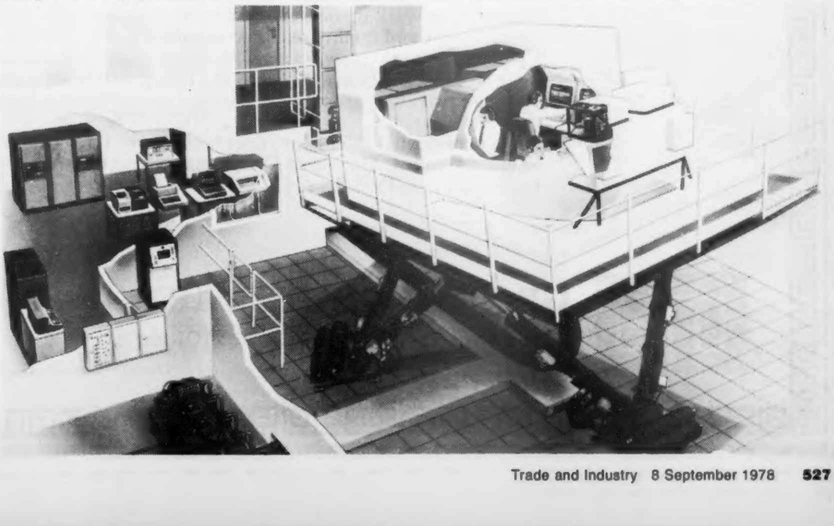
Over 400 of British Aerospace 125 business jets have been sold since 1962, half of them in north America. Above is the current fan-jet, series 700 version, powered by two Garrett AiResearch TFE-731 engines.

Westland Helicopters Ltd's Wideye, a remotely piloted helicopter for aerial surveillance using a Marconi Avionics payload. Possible civil applications include crop spraying or police, fire or pipeline surveillance.

Nose landing gear for the British Aerospace Hawk undergoing a fatigue testing programme at AP Precision Hydraulics Ltd that simulates all ground manoeuvring and landing conditions.



Redifon Simulation Ltd's new generation flight simulator approaches total realism and fidelity in pilot training. Much of the new technology is incorporated in a 747 simulator for Boeing and an inflight refuelling simulator for the United States Air Force which are under construction.



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Readers willing to help worthwhile cause please draw this advertisement to the attention of recently retired or retiring top businessmen.

Saudi Arabia

Construction Costs

Metra require two people to work on a Standard Costing System, in Riyadh. Both must be capable of an analytically based evaluation of construction costs and be familiar with the breakdown of engineering quantities in terms of labour, materials, plant, overheads and profit. Other essential qualities include an ability to apply imagination to problem solving and to express views clearly in conversation and in writing. A knowledge of costs in Saudi Arabia would be an advantage.

Both appointments will be for a period of about one year, starting as soon as possibie. Accommodation, subsistence and other benefits will be provided. Bachelor status is preferred.

The SENIOR TECHNICAL ADVISER to the team should have more than fifteen years' experience as a Contractors Estimator/Negotiator, or Quantity Surveyor. Salary c. £25,000.

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Contact Ross Charlton, **Metra Consulting Group, 23 Lower Belgrave Street, London SW1W 0NS. Telephone: 01-730 0855.**

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For a confidential discussion, telephone Terry I. Jones, **Grosvenor Stewart Limited**, Hamilton House, 15 Tilehouse Street, Hitchin, Herts. Tel: (0462) 55303 (24 hour answering). Please quote ref. 626.

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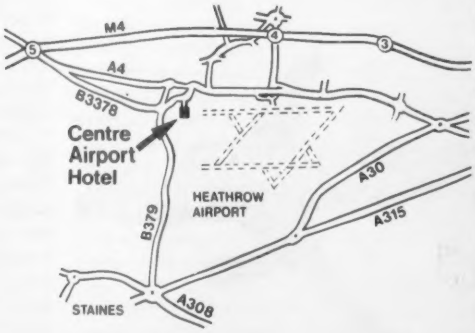
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Home news

Go-ahead for new Rolls-Royce engine

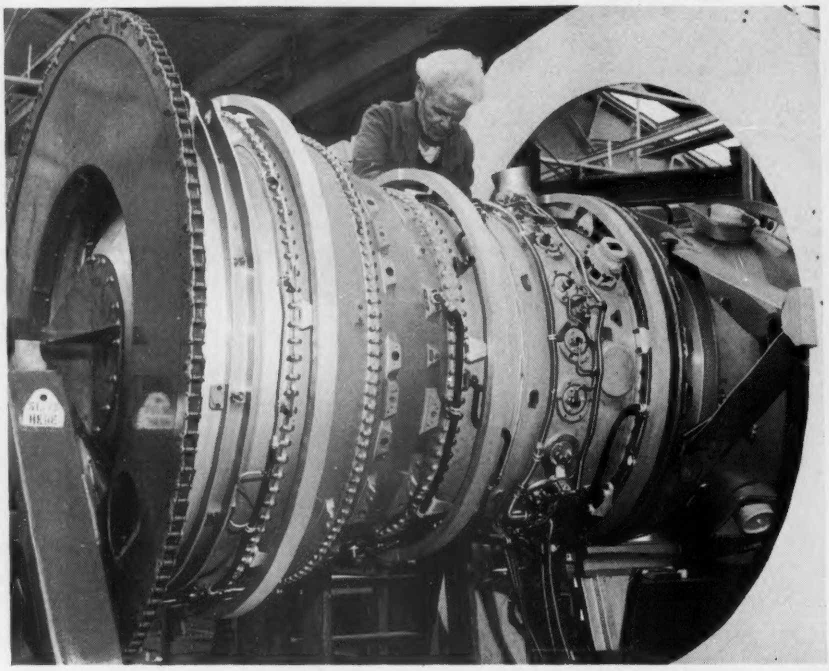
Approval for Rolls-Royce to develop the RB 211-535 engine was announced by Secretary of State for Industry Eric Varley on 31 August.

British Airways and Eastern Air Lines of the United States in an order for 40 Boeing 757 airliners have selected Rolls-Royce RB 211-535 engines to power the new twinjet. Eastern has also placed an option for a further 24 aircraft. The value of the order to Rolls-Royce, including options and engine spares over the life of the aircraft, is estimated by the company at more than £300 million.

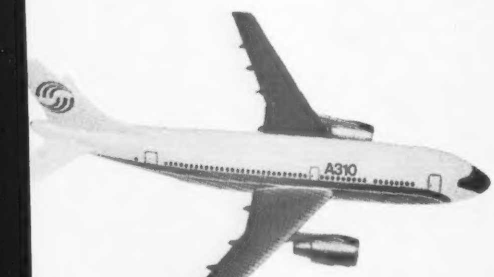
Approval for the placing of the British Airway's order was announced by Secretary of State for Trade Edmund Dell on 31 August. He said that it was an example of the commercial freedom allowed by the government to British Airways to determine its own aircraft purchases.

Describing the 535 as a new quiet modern technology engine, Mr Varley pointed out that the RB 211 in its 22 and 524 versions already represented at least 10 000 jobs in Rolls-Royce and around a similar number at suppliers. Employment on the 535 should build-up over the next few years to represent up to 5000 jobs in Rolls-Royce and at least that number at suppliers.

The government, Mr Varley said, was confident that the 535 would prove to be a very successful engine, suitable for powering many of the next generation of civil airliners currently being developed. Its launch would keep Britain in the 'big league' of the international aero-engine business.


Heart of the new RB 211-535 engine, seen here as a mock up in Rolls-Royce's Derby factory.

. . . and endorsement for Airbus project



Collaboration between British Aerospace and other aircraft manufacturers was the second major announcement on the future of the British aerospace industry to be made by Eric Varley on 31 August.

Mr Varley explained that British Aerospace had informed the government that they wished to become a full partner in Airbus Industrie from 1 January next year on the basis of an agreement they had negotiated between themselves, Aerospatiale and Deutsche Airbus. The government had decided to endorse the agreement initialled by the three industries and were hoping for a similiar approval by the governments of the French Republic and the Federal Republic of Germany. Some questions raised by the other governments had still to be resolved. These were being pursued urgently.

He pointed out that if the agreement was accepted by those governments British Aerospace would take a 20 per cent share in Airbus Industrie and would play a full part in the development and manufacture of the A310 derivative (formerly known as the B10) of the A300B airbus.

A matter of particular concern to the other governments was the prospect for a British Airways order. The government had therefore sought the advice of British Airways, who in the course of their analysis of their future requirements had had close contact with Airbus Industrie and had given particular attention to the A310. The government had accepted British Airways' conclusion that their immediate requirement was met by the acquisition of narrow-bodied aircraft of medium size and range, but British Airways considered on the basis of existing comparisons that any requirement for wide-bodied aircraft of medium size and range could most satisfactorily be met by the 310. The government had therefore welcomed British Airways' intention to continue their close contact with Airbus Industrie in order to study the application to their fleet of the 310 in a Rolls-Royce engined version.

Dell calls for low air fares and reasonable profits

Aims of an international civil aviation policy should be to provide the lowest possible fares for consumers consistent with reasonable profits for the airlines and an incentive for the latter to achieve the maximum efficiency. Secretary of State for Trade Edmund Dell made this point when speaking at the *Financial Times* world aerospace conference in London on 31 August.

He reflected that few, if any, activities had been so much regulated by governments as had international civil aviation. This included both bilateral traffic rights and prices. With prices controlled by government, some airlines had sought to improve their share of the market by increasing the frequency of their services, while the others, fearful of losing market share, had matched the capacity increases of their rivals. This has led to excessive capacity, low load factors and low profits.

In order to generate more traffic and fill the empty seats the airlines had introduced promotional fares which might or might not have been economic. In turn this had led them to put on extra capacity to carry the extra traffic they had generated.

Another, separate, effect of the fixing of fares had been that schemes of great ingenuity were devised to offer discounts to selected customers. This had led to further regulation in an attempt to eliminate or mitigate the consequences of the original regulation. All this represented a major constraint on the scope for competition in international civil aviation. Whatever the intention of governments, it frequently resulted in keeping prices higher than they needed to be, to the unnecessary disadvantage of travellers.

There had been a reaction against regulation and against high fares particularly on the north Atlantic route. There had been a growing feeling, not only within the United States administration, that the system of governmental regulation had gone too far. But Mr Dell said that the fact that there had been an excess of regulation did not mean that all regulations were unnecessary and undesirable. The question was one of degree and kind.

Mr Dell said that there would seem to be no doubt of the enthusiasm of the American administration for competition in the case of civil aviation. But the United States intended to continue to protect its domestic civil aviation market from foreign competiton, providing its own operators with a powerful base from which to compete on international routes. Certainly this situation explained the importance to the United States' bilateral partners of retaining some control over the conditions of competition.

Three records for British airports

Figures released by the British Airports Authority show three records in July.

☐ Heathrow handled 10 000 passengers in one hour.

☐ Gatwick handled a million passengers in the month.

☐ Also at Gatwick, the 12 monthly traffic figures topped 7 million.

Availability of cheaper transatlantic fares was a major factor in the growth in traffic which occured despite the delays caused by air traffic control problems.

Over 4.4 million passengers used BAA airports in the month – an increase of 10 per cent on last July and the fourth successive month to show growth in double figures.

In the south-east Heathrow recorded a rise of 8 per cent, Gatwick 19 per cent and Stansted 25 per cent.

A major element of the growth at Gatwick was traffic on the new scheduled routes. Scheduled services to the US carried 70 000 passengers in the month, of which nearly 32 000 travelled on Laker's Skytrain. Charter traffic increased by 10 per cent.

At Heathrow, again the dominant feature of the month was the increase in passengers on routes to and from the United States, this time one of 46 per cent. Cheaper fares helped average loads on US services to rise by 35 per cent and led to an average daily flow of 15 000 passengers.

Results in Scotland were mixed. Glasgow and Aberdeen both showed increases, but there were falls at Edinburgh and Prestwick.

BSI plugs foam insulation gap

A standard and a code of practice for cavity wall insulation has been published by the British Standards Institution. It is the first British standard in the cavity wall insulation field. BSI is also introducing a scheme for registering firms involved in this work.

These measures should not only set the standards for the manufacture and installation of the basic materials but should also ensure that work carried out by BSI-certified firms will be in strict accordance with the specifications. The new scheme has been devised in consultation with the Department of the Environment, the Agrément Board, the National Cavity Insulation Association and the Structural Insulation Association.

Sharply rising fuel costs in recent years have brought home the importance of energy conservation and the need for effective thermal insulation. Some 40 per cent of homes in the UK have external cavity walls, and it has been estimated that more than a third of heat lost in the average home escapes through the walls.

The two new standards cover manufacturing and installation aspects. BS 5617 'Urea-formaldehyde (UF) foam for thermal insulation of cavity walls' specifies requirements for the foam and the raw materials used in making it.

The companion document is a code of practice, BS 5618 'Thermal insulation of cavity walls (with masonry inner and outer leaves) by filling with urea-formaldehyde (UF) foam'. The code sets out the essential procedures for on-site manufacture and installation of this material. The method described has already proved effective in increasing thermal insulation in buildings having cavity walls and not exceeding a height of 10 m. The code provides essential criteria by which owners and contractors can assess the suitability of individual buildings for treatment. Details are also given of the various checks to be made in the building before, during and after filling to achieve a satisfactory installation. Attention is given to safety precautions relating to flues to avoid blocking them and thus creating a hazard. Another important feature is a set of maps, which show the relevant 'driving rain index contours' for all areas of England, Wales and Scotland.

Both the new standards require detailed records to be kept of all checks and tests carried out during every stage of the contract.

Copies of BS 5617 and BS 5618 may be obtained from BSI Sales Department, 101 Pentonville Road, London N1 9ND. Prices: BS 5617 £3.20, BS 5618 £7.80.

DHSS proposes ban on phenacetin

Proposals to ban the use of phenacetin have been announced by the Department of Health and Social Security. This follows a committee on the review of medicines' recommendation that, on grounds of safety, phenacetin has no place in analgesic, anti-inflammatory or antipyretic therapy.

The Medicines (Phenacetin Prohibition) Order 1974 had made phenacetin available on prescription only, but it has become evident that while there is no product containing phenacetin alone on the market there are about 50, such as aspirin and codeine, containing phenacetin in combination with other active ingredients with names which do not necessarily indicate the presence of phenacetin. Although declining, the number of prescriptions for such products is still something approaching 500 000 a year.

DHSS has opened consultations with the medical and pharmaceutical professions and consumer interests on a proposal to prohibit the sale, supply and importation of phenacetin under section 62 of the Medicines Act 1968.

Sanitaryware: no monopoly against public interest

No monopoly conditions operating against the public interest have been found by the Monopolies and Mergers Commission in the supply in the UK and export from the UK of ceramic sanitaryware. Announcing publication of the commission's investigation, John Fraser, Minister of State for Prices and Consumer Protection, said that in the absence of any findings of adverse effect on the public interest there were no grounds for action by Secretary of State Roy Hattersley.

In the home market, the commission concluded that a monopoly situation existed in favour of Armitage Shanks Group, and its wholly owned subsidiary, Armitage Shanks Sales, in that the latter supplied significantly in excess of 25 per cent by value of all reference products supplied in the UK in 1976. But the monopoly situation only existed in favour of these companies; the other three major manufacturers, Twyfords, Doulton Sanitaryware and Ideal-Standard, each had less than 25 per cent of the market.

Though the commission found that there were no issues of public interest that concerned Armitage Shanks only or arose specifically because of the monopoly situation in its favour, the commission nevertheless examined the effect on the public interest of two matters – the pricing of coloured British standard specification ware and of luxury ware, and the giving of confidential rebates to customers.

Since major manufacturers' list prices for certain BS Specification products had for many years shown a marked degree of similarity, the commission also considered whether a complex monopoly situation existed among the manufacturers through the possible absence of any effective price competition. The commission accepted, however, that since the products, being manufactured to BS Specification, were virtually indistinguishable and because their customers were well-informed, price-conscious buyers, it was essential for manufacturers to ensure that list prices were never materially higher than those of competitors for comparable products. Moreover the commission found ample evidence of price competition in ways other than changes to list prices, including the spread of confidential rebates as a result of the bargaining power of some builders' merchants' reduced prices for less than standard quality and discounts for immediate payment.

Under the terms of section 8(1) of the Fair Trading Act 1973 a monopoly situation existed in relation to UK exports if at least one-quarter of all the UK output of ceramic sanitaryware was produced by one and the same person. The commission concluded that a monopoly situation in relation to exports existed in that Armitage Shanks Ceramics (a wholly owned subsidiary of the Armitage Shanks Group) produced in 1976 approximately 31 per cent of value of the sanitaryware produced in the UK and no other manufacturer accounted for as much as 25 per cent but that no public interest issues arose from this fact.

The commission considered that an export agreement that most UK ceramic sanitaryware manufacturers were parties to gave no cause for concern and that it might, by restricting competition, remove a stimulus to efficiency, since UK ceramic sanitaryware faced keen price competition in export markets. As to the effect of the agreement on exports it was satisfied that UK exports were generally competitive in price and that it had not restricted the volume of exports.

The report, 'Monopolies and Mergers Commission: ceramic sanitaryware' (cmnd 7327), is available from HMSO, price £1.85.

More time for electricity meters report

Secretary of State for Prices and Consumer Protection Roy Hattersley is allowing the Monopolies and Mergers Commission more time to complete its report on the supply in and exports from the United Kingdom of electricity supply meters. This follows representations from the commission that it could not complete the report by 30 September 1978, the date specified in the reference. A direction given by the secretary of state allows the commission an extended period to 31 December 1978 for the purpose of reporting on the reference.

Notts bakery assures Fair Trading DG on pies

RHM Bakeries (Northern) Ltd has assured Gordon Borrie, Director General of Fair Trading, that its Mansfield bakery will take all reasonable precautions and exercise all due diligence to comply with the Meat Pie and Sausage Roll Regulations 1967.

For a period up to January 1978 samples taken of the products sold by Landers Bakery of Oxford Street, Mansfield, Nottinghamshire, showed that some steak and kidney pies, Cornish pasties and potato and meat pies did not have sufficient meat content.

RHM Bakeries (Northern) Ltd trading as Landers Bread has given the director general written assurances under part III of the Fair Trading Act that it will take care not to infringe the regulations in future. Breaking such an assurance could lead to an order from the courts forbidding a trader to continue his unfair conduct to consumers. Breach of an order could be contempt of court and lay the offender open to a fine or to imprisonment.

As a result of the closure of an ancillary production unit at Mansfield, decided upon as a matter of policy in the latter part of 1977, RHM is now substantially purchasing its pies from a specialist meat product company.

The director general has expressed appreciation to the staff of the consumer protection department of Nottinghamshire County Council for their help in obtaining this assurance.

Commission reports on pricing of beds

All forms of manufacturers' recommended retail prices for beds should be prohibited and – except during genuine sale periods – the common practice of double pricing should also be stopped. These are among the findings in a Price Commission report published on 31 August.

The report also criticises the practice of 'label engineering' by which some manufacturers sell beds made to the same basic specifications under different names with widely varying recommended retail prices. Consumers can be confused and obstructed in checking and comparing the prices and quality of beds by this, says the commission.

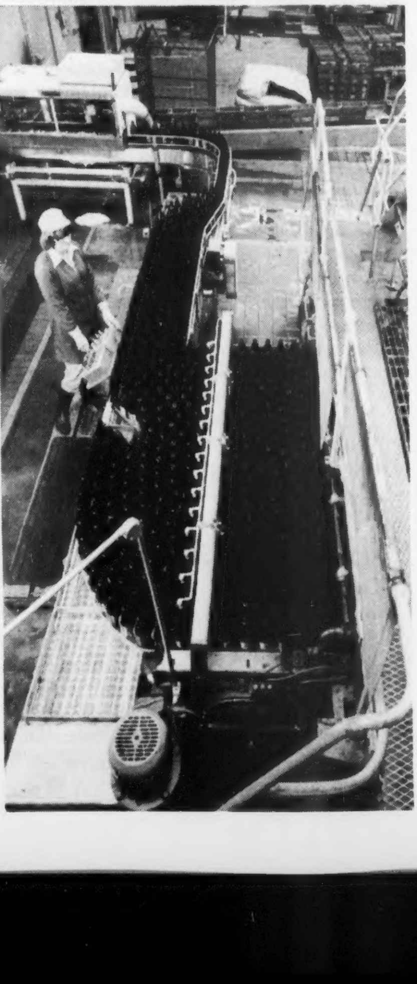
The report finds that nearly half the beds sold in Britain are subject to double pricing and suggests that while some manufactuers are trying to fix recommended retail prices at realistic levels others are deliberately setting them at artificially inflated levels in order to permit retailers to make spectacular discount claims.

Secretary for prices Roy Hattersley is considering the report, and will be consulting interested parties about its findings. Those who consider that they might be affected by the report may make representations in writing to the secretary of state.

'Price Commission sectoral examination report 7: the pricing of beds' is available from HMSO, £1.35.

New conveyor at Bulmers cider plant

Section of the new conveyor at the Bulmer cider plant in Herefordshire. Capable of handling 14 500 two-pint cider flagons every hour, the new line was designed and built by Associated Conveyors Ltd of Pembridge, Herefordshire. The accumulation table in the foreground acts as a buffer for the Bary-Weymiller washer giving the line two minutes residence time.



Proposals for payment of oil royalty in kind

Tony Benn, Secretary of State for Energy, is proposing to take a limited amount of royalty for oil produced in the second half of 1979 in kind and is opening discussions with a number of licensees. The British National Oil Corporation will market the oil.

Model clause 11 of part II of schedule 2 to the Petroleum and Submarine Pipelines Act 1975 enables the secretary of state to require a licensee to deliver in whole or part substitution for cash royalty up to 12½ per cent of the total amount of petroleum won and saved by the licensee from the licensed area in a particular six-month chargeable period (these are from 1 January to 30 June and 1 July to 31 December).

The secretary of state must serve a notice on the licensee at least six months before he intends to take royalty in kind. Before serving the notice he must give the licensee a copy of the proposed notice; the licensee has the right to make representations which the secretary of state must consider. The department has reached this stage of opening discussions with licensees. The secretary of state has to have regard to the desirability of not disturbing unduly the licensee's arrangements for delivering petroleum from the licensed area.

The secretary of state will pay the cost incurred by the licensee in treating and delivering the royalty oil.

New project in former typewriter factory

The former Imperial Typewriters factory in Hull has been acquired by Armstrong Patents, a wholly owned subsidiary of Hull-based Armstrong Equipment. It will house a new exhaust manufacturing project which is expected to create 175 jobs over the next three years. To help with the project the Department of Industry's regional office in Leeds has offered financial assistance under the Industry Act 1972.

Export experts.

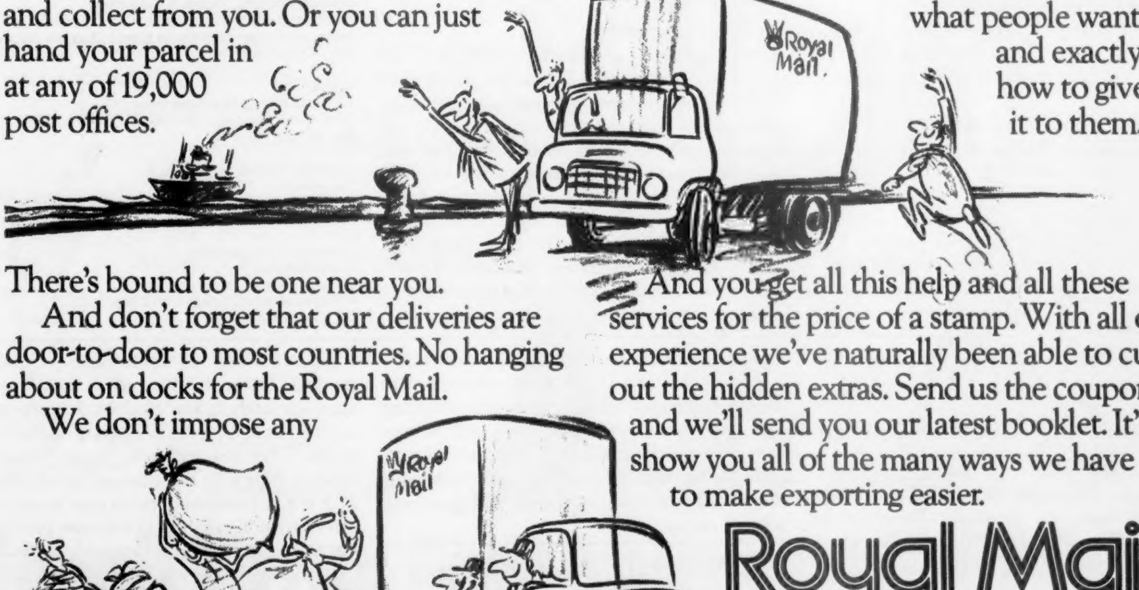
No one, but no one, knows as much about sending parcels and packages overseas as we do.

We carry £400m worth of exports through our overseas parcels network each year. Over 200 countries have the kind of relationship with us that has helped us make exporting virtually pitfall-free.

We've been able to cut form filling down to a minimum.

We can send parcels by the consignment or just one sample in a hurry.

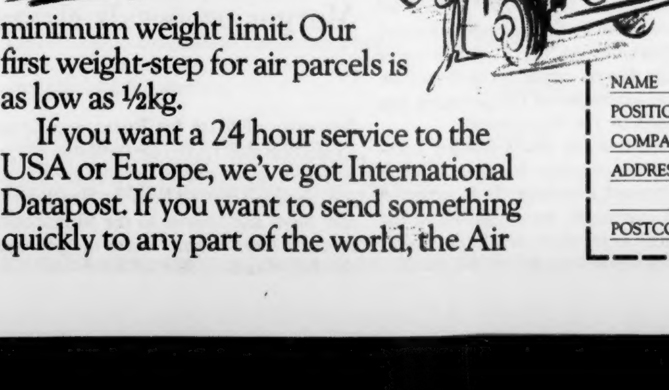
If you've got enough parcels, we can come and collect from you. Or you can just hand your parcel in at any of 19,000 post offices.



There's bound to be one near you.

And don't forget that our deliveries are door-to-door to most countries. No hanging about on docks for the Royal Mail.

We don't impose any minimum weight limit. Our first weight-step for air parcels is as low as ½kg.



If you want a 24 hour service to the USA or Europe, we've got International Datapost. If you want to send something quickly to any part of the world, the Air Parcel service is available and for non-urgent items we can still offer you very reasonable surface mail rates.

To many countries your parcels can be insured or go with cash on delivery.

After all these years in the exporting business we know what people want and exactly how to give it to them.

And you get all this help and all these services for the price of a stamp. With all our experience we've naturally been able to cut out the hidden extras. Send us the coupon and we'll send you our latest booklet. It'll show you all of the many ways we have to make exporting easier.

Royal Mail

TO: ANNE LATHAM, ROOM 127, FREEPOST,*
POSTAL HEADQUARTERS, ST. MARTIN'S-LE-GRAND,
LONDON EC1B 1HQ. *You don't even need a stamp.

Please send me your latest booklet: TI 89
Overseas Postal Services. A quick guide.

NAME
POSITION IN COMPANY
COMPANY
ADDRESS

POSTCODE

Contracts preference schemes in development areas

For many years now public purchasing authorities have been operating arrangements, known as the contracts preference schemes, which provide a measure of preference for firms in development and special development areas and in Northern Ireland. While the schemes, by their nature, do not involve any additional government subvention, they do give an edge to firms in the qualifying areas in competition with firms from elsewhere.

A recent review has suggested that more use could be made of the schemes by firms in the qualifying areas. An obvious limitation is the quantity and quality which public purchasers require, but there is some evidence that not all firms which could benefit from the schemes are aware of their existence.

There are two schemes: a general preference scheme, which has been in operation since the 1930s, and a special preference scheme, which was introduced in 1950.

General preference scheme

The general preference scheme is operated by government purchasing departments, nationalised industries, and certain other public bodies. The scheme gives approved manufacturers in qualifying areas better opportunities to tender for government contracts. When tenders are assessed, the scheme provides for contracts to be let normally to firms located in these areas, if, taking account of price, quality, delivery, etc, their tenders are broadly as attractive as the most favourable tenders received from firms in other areas.

Special preference scheme

Government purchasing departments and the Post Office operate a special preference scheme to give firms in the qualifying areas a second opportunity to secure contracts, although there is still no price preference. If, under the general preference scheme, a firm in the qualifying areas has not succeeded in winning the order or a substantial part of it, the firm in those areas which submitted the lowest acceptable tender may be offered 25 per cent of the order provided it can requote at such a price that the cost of the total order to the purchaser is no higher than it would have been if the whole order had gone to the original lowest tenderer, from the non-qualifying areas.

This means that where the original tenderer, who will be asked to retender for 75 per cent of the order, does not increase his tender unit price the firm will have to meet that price for the 25 per cent re-offered, but where the original tenderer finds that with the reduced order his unit price increases, the firm will have to re-quote at a lower price. If the first firm approached is not interested in re-quoting on these terms, the offer may be made to the next lowest tenderer from the qualifying areas and so on.

Coverage

Firms in the special development and development areas and in all parts of Northern Ireland are eligible to benefit from the schemes. The special development and development areas cover all of Scotland except the Aberdeen travel-to-work area; most of Wales; and, in England, the northern region, Merseyside, Hull, Grimsby, Scarborough and Whitby employment office areas, most of Cornwall, and part of Devon.

Revised brochure

The Department of Industry publishes a free brochure about the schemes, which has recently been revised. It contains details of the purchasing authorities which operate the schemes and the type of goods purchased, and explains how to take advantage of the schemes.

Copies of the brochure and further information may be obtained from the Regional Industrial Development Division (Branch 1), Department of Industry, Millbank Tower, Millbank, London SW1p 4QU, tel. 01.211 6012, or from any of the following offices.

England
Department of Industry Regional Offices

Northern Region
Stanegate House, Groat Market
Newcastle upon Tyne NE1 1YN
Tel. Newcastle upon Tyne 24722

Cumbria District Office,
Town Hall, Cockermouth, Cumbria CA13 3NP
Tel. Cockermouth 3498/9

Northern Western Region
Sunley Building, Piccadilly Plaza, Manchester M1 4BA
Tel. 061-236 2171

Yorkshire and Humberside Region
Priestley House, 1 Park Row, Leeds LS1 5LF
Tel. Leeds 443171

West Midlands Region
Ladywood House, Stephenson Street, Birmingham B2 4DT
Tel. 021-632 4111

East Midlands Region
Severns House, 20 Middle Pavement,
Nottingham NG1 7DW
Tel. Nottingham 56181

Eastern Region
Charles House, 375 Kensington High Street,
London W14 8QH
Tel. 01-603 2070 ext. 359 and 360

London and South Eastern Region
Charles House, 375 Kensington High Street,
London W14 8QH
Tel. 01-603 2060 ext. 221

South West Region
The Pithay, Bristol BS1 2PB
Tel. Bristol 291070

South West Industrial Development Office
Phoenix House, Notte Street, Plymouth PL1 2HF
Tel. Plymouth 21891

Scotland
Scottish Economic Planning Department
Industrial Development Division,
Alhambra House, 45 Waterloo Street, Glasgow G2 6AT
Tel. 041-248 2855

Wales
Welsh Office Industry Department,
Government Buildings, Gabalfa, Cardiff CF4 4YL
Tel. 0222 62131

Northern Ireland
Department of Commerce,
Chichester House, 64 Chichester Street, Belfast BT1 4JX
Tel. 0232 34488

Department of Commerce,
Representative,
Northern Ireland Government Office,
11 Berkeley Street, London W1X 6BU
Tel. 01-492 0601

New Scottish craft centre

An investment of £400,000 is to be made by the Highlands and Islands Development Board (HIDB) and the Scottish Development Agency in a new centre at Beauly, Inverness-shire, to provide a range of development services to the crafts industry in Scotland. To be named Highland Craftpoint, it will have a staff of 18.

Professor Kenneth Alexander, chairman of the HIDB, said on 30 August that the project, which has the blessing of the Secretary of State for Scotland, was one of the most ambitious exercises in training and development yet initiated by the board. Through the SDA's participation, he said, Highland Craftpoint's resources would benefit the crafts industry throughout Scotland.

A major concern of Highland Craftpoint will be practical training but the intention is also to provide comprehensive technical information and marketing services, to improve design and quality standards, and to promote new craft business. It will incorporate separate sections with specialists in training, marketing and information. Initially, there will be two production units dealing with ceramics and precious metals, a graphics and packaging design unit, an exhibition area, and, possibly, a retail outlet.

Manufacturers move into new factories

Reality Furniture is to occupy a 1350 m^2 advance factory built by the English Industrial Estates Corporation on the Department of Industry's Lea Green estate on Merseyside. An immediate extension to the premises has been authorised by the department.

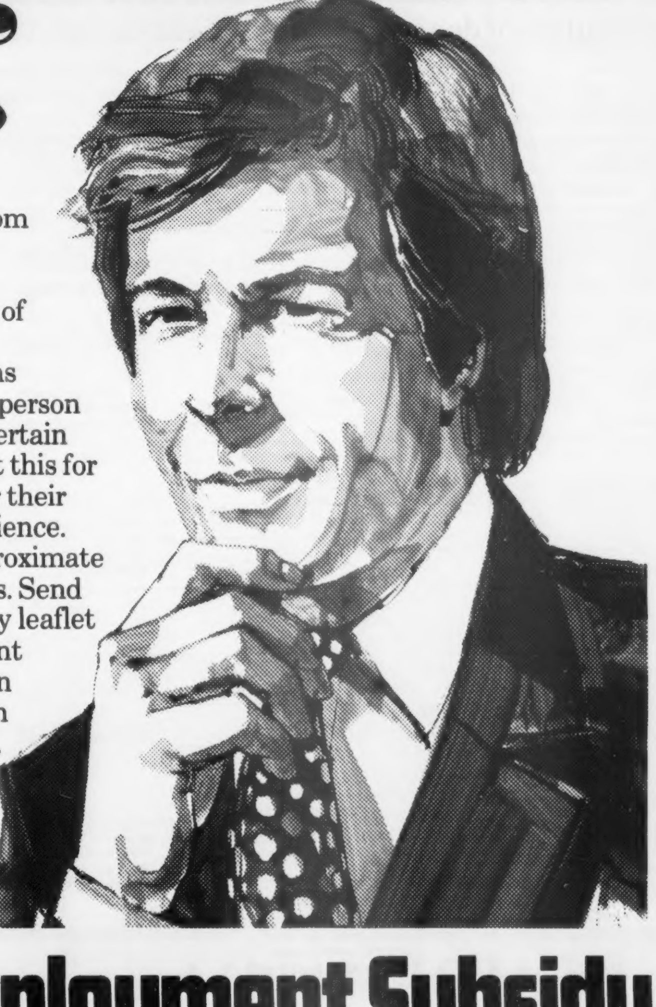
Reality Furniture, a newly-formed company, will use the premises for the manufacture of upholstered furniture. It is expected that 100 will eventually be employed in the extended factory as production is built up over the next two or three years.

Manufacturer of confectionery products, the Jolly Baker, is to occupy a terrace unit of approximately 225 m^2 built by the corporation on the department's Roundhay Road site in Leeds. Premises currently occupied are too small to cope with the upsurge in demand, but with the acquisition of these new larger premises it intends not only to increase production but to introduce a new range of products. Its current workforce will be transferred to the new premises, and with the increase in production it expects to employ a further 12 people within the next two years.

Merger proposals cleared

Secretary of State for Prices and Consumer Protection Roy Hattersley had decided, on the information at present before him, not to refer the proposed merger between Beecham Group and Scott and Bowne to the Monopolies and Mergers Commission under the provisions of the Fair Trading Act 1973.

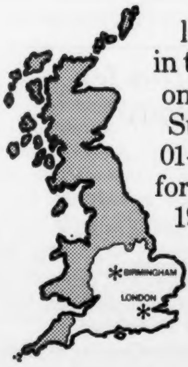
'I could do a lot more business. But I can't afford to staff up.'



If yours is a private manufacturing firm then you may be entitled to financial help from the Government.

If you employed under 200 people on 15th March 1978 in an Assisted Area, or one of the Inner City Areas within London and Birmingham, then under the Small Firms Employment Subsidy every extra full-time person you take on could get you £20 a week – and certain part-time workers £10 a week. You could get this for up to 26 weeks, which should see you over their initial period while they gain experience.

The map shows the approximate locations of the Assisted Areas. Send in the coupon for the explanatory leaflet on the Small Firms Employment Subsidy, or phone Jack Bellis on 01-214 6446. This scheme is open for application until 31st March, 1979. And the sooner you apply, the better.



▨ **Assisted Areas**

* **Inner City Partnership Areas only**

Small Firms Employment Subsidy

Please send me details of the Small Firms Employment Subsidy Scheme, and the areas in which it applies.

Post to: Jack Bellis, Small Firms Employment Subsidy, P.O. Box 702, London SW20 8SZ, or telephone him on 01-214 6446.

Name ______________________________

Company ____________________________

Address _____________________________

____

Department of Employment

Work of industrial design students on show

An exhibition of the work of post graduate industrial design students opened at the Design Centre, London, on 29 August for a four-week showing until 30 September. This is the first exhibition of its type to be organised by the Design Council in association with the five colleges in Britain currently offering master's degree courses in industrial design.

The work shown ranges from projects, such as a paddy field vehicle with potential for developing countries, to designs such as a futuristic audio-visual centre, which could improve the quality of life in industrialised nations. Models made by the post graduate students as part of their final year project work for their master's degree comprise the major part of the exhibition and examples of their thoroughly researched and well presented written work are also shown.

The council's interest in the training of industrial designers was clearly set out in the Carter report published during 1977. This exhibition is another example of the continuing collaboration between the council and the polytechnics at Birmingham, Leicester and Manchester and the two London colleges – the Central School of Art and Design and the Royal College of Art – which offer two-year post graduate courses in industrial design. A three-year post graduate course in industrial design is also available at the RCA. The objectives of these courses is to provide the additional training necessary, after the first degree, to prepare students for professional practice and to provide opportunities for design research.

Particulars of dealers in securities and of unit trusts

The following changes have taken place in parts 1, 4 and 5 of the 1978 edition of 'Particulars of Dealers in Securities and of Unit Trusts' published in May under the Prevention of Fraud (Investments) Act 1958:

PART 1 HOLDERS OF PRINCIPAL'S LICENCES

Name	Nationality or country of incorporation	Address
ADDITIONS		
Sharjah Securities (UK) Ltd	Great Britain	49 Park Lane, London W1T 3LB
DELETIONS		
H. D. N. Reid of Lamplough and Malcolm		15 Copthall Avenue, London EC2R 7BU
CHANGE OF ADDRESS		TO
Lawson Securities Ltd		25 Charlotte Square, Edinburgh EH2 4EZ
Libra Bank Ltd		140 London Wall, London EC2Y 5DN

PART 4 EXEMPTED DEALERS including TRUSTEE SAVINGS BANK

Name	Nationality	Address
CHANGE OF NAME		TO
Girard Trust Bank		Girard Bank

PART 5 AUTHORISED UNIT TRUST SCHEMES

Group and/or name and address of management company	Scheme	Trustee
ADDITIONS		
Murray Johnstone Unit Trust Management Ltd 163 Hope Street, Glasgow G2 2UH	MJ European Fund	Clydesdale Bank Ltd 30 St Vincent Place, Glasgow G1 2HL
CHANGES		
DELETE		
Piccadilly Unit Trust Management Ltd Wardgate House 59A London Wall, London EC2M 5UA	Piccadilly Accumulation Fund Piccadilly American Fund Piccadilly Capital Fund Piccadilly Extra Income Unit Trust Piccadilly Far East Fund Piccadilly International Earnings and Assets Fund Piccadilly Private Fund Piccadilly Technology Fund Piccadilly Small Companies Fund	The Governor and Company of the Bank of Scotland The Mound, Edinburgh EH1 1YZ
AND REPLACE BY		
Antony Gibbs Unit Trust Managers Ltd 3 Fredericks Place, Old Jewry London EC2R 8HD	Piccadilly Accumulation Fund Piccadilly American Fund Piccadilly Capital Fund Piccadilly Extra Income Unit Trust Piccadilly Far East Fund Piccadilly International Earnings and Assets Fund Piccadilly Private Fund Piccadilly Technology Fund Piccadilly Small Companies Fund	The Governor and Company of the Bank of Scotland The Mound, Edinburgh EH1 1YZ

In the entry for Crescent Unit Trust Managers Ltd
DELETE
Crescent Growth Fund
AND REPLACE BY
Crescent American Fund

In the entry for Target Trust Managers Ltd
DELETE
Coyne Growth Fund
AND REPLACE BY
Target Special Situations Fund

Health and safety in the machine shop

The Machine Tool Industry Research Association has arranged a one-day seminar on 'health and safety in the machine shop' in Macclesfield on Wednesday, 23 November. The seminar will be of interest to all those concerned with machine shops including employers, designers and manufacturers of equipment, safety officers and trades union representatives.

Speakers at the seminar will include representatives of manufacturers and users of machine tools and of the trades unions. Ample opportunity will be given for discussion so that individual experiences can be forwarded and points of view exchanged. A representative of the Health and Safety Executive will describe the impact and relevance in practice of the health and safety at work act since its enactment while speakers from MTIRA will describe regulations in the United Kingdom and the types of assistance which are available to industry on problems relating to the safety of machine tools, the emission of noise and the use of oils in machine shops.

Further information can be obtained from Neil Percival or Mrs B. P. Bosman at the Machine Tool Industry Research Association, Hulley Road, Macclesfield, Cheshire SK10 2NE, tel. Macclesfield (0625) 25421/26189.

Big opportunities for offshore hardware

Offshore exploration and production was a growth industry offering big rewards to the innovators, Jolyon Sloggett told delegates at the third international offshore craft conference in London on 4 September.

Mr Sloggett was appointed earlier this year by British Shipbuilders to lead its drive into the offshore market.

He told the conference that experts were agreed that at least half of the oil still to be found in the world was underwater. With less than 20 per cent of the world's requirements now being produced offshore, he said that the future growth of the industry could be predicted with a degree of certainty perhaps not found in any other industry.

Mr Sloggett said the expansion of exploration into deeper and more difficult waters would require new types of hardware. It was obvious that at some point the present fixed platforms would be replaced by some form of floating platform. The design of supply craft was open to drastic change and, if a suitable passenger-carrying craft could be developed, he told delegates it would find a ready market.

Marine survey office for east Scotland moves

Department of Industry's marine survey office for the east of Scotland district is to move from 41½ Union Street, Aberdeen, on 18 September. The new address will be: Department of Trade, Marine Survey Office, Greyfriars House, Gallowgate, Aberdeen AB9 2AZ. The new telephone number will be Aberdeen (0224) 23411; telex number will be unchanged.

The department's mercantile marine office and the examination centre will continue at 41½ Union Street. The telephone number for the mercantile marine office continues to be Aberdeen (0224) 26272/3 while the examination centre telephone number will be Aberdeen (0224) 23411.

Mallaig trawler collision inquiry

A public formal investigation into the circumstances surrounding the collision of the fishing vessels *Stroma II* and *Rotche* will open at 10.30 hours on 11 September in the Sheriff Court, 149 Ingram Street, Glasgow. The two Fraserburgh trawlers collided off Mallaig on 8 July 1977. *Rotche* sank swiftly with the loss of two lives. *Stroma II* sank later but was subsequently salvaged.

London conference on trading in the next decade

Trading in the 1980s is the subject of a British Institute of Management one-day conference in London on 14 September as part of the institute's campaign on strategy performance and utilisation of resources. The conference is being organised in association with the Institute of Marketing and the Institute of Purchasing and Supply. Further details can be obtained from British Institute of Management, Management House, Parker Street, London WC2B 5PT, tel. 01-405 3456.

Departmental publications not sold through HMSO

This list includes material issued by the Departments of Industry, Trade, Prices and Consumer Protection, and Energy; the Monopolies and Mergers Commission; the Office of Fair Trading, and the Price Commission which was notified to the compiler during August.

Department of Industry

Chemicals and Textiles Division

Towards a strategy for the plastics processing industry: a study based on a survey of plastics processing companies in South Wales during 1977, carried out by the Rubber and Plastics Processing Industry Training Board and commissioned by the Department of Industry. 1978. 85 pages. £1.50. Department of Industry, Abell House Library, Room 023, Abell House, John Islip Street, London SW1P 4LN.

Industrial Planning Division

Project-engineers and technologists for tomorrow

School science and everyday life: a teaching aid available on free loan to schools and colleges. 1978. 1 folded sheet. Department of Industry, Information Division, Room 302, Gaywood House, Great Peter Street, London SW1P 3LW.

Research and Technology Requirements and Perspectives Division

Industrial energy thrift scheme. Report no. 1: Energy use in the woollen and worsted industries. A report prepared by Wira. 1978. 23 pages.

Research and development requirements and programmes: report 1977-78. 1978. 44 pages. Department of Industry, Abell House Library, Room 023, Abell House, John Islip Street, London SW1P 4LN.

Technology Reports Centre

Dialtech: the fast way to scientific and technological information. 1978. 1 folded sheet. Department of Industry, Technology Reports Centre, Station Square House, St Mary Cray, Orpington, Kent BR5 3RF.

R & D abstracts. Vol. 38, no. 2, 15 July 1978.

R & D abstracts indexes. Vol. 37, nos. 1-12, January to June 1978. 1978. 2 parts. Available on annual subscription of £42 from Department of Industry, Technology Reports Centre, Station Square House, St Mary Cray, Orpington, Kent BR5 3RF

Department of Trade

Accidents Investigation Branch

AIB bulletin no. 8/78. 21 August 1978. 18 pages. Department of Trade, Accidents Investigation Branch, Kingsgate House, 66/74 Victoria Street, London SW1E 6SJ.

British Overseas Trade Board

BOTB news. No. 2, July 1978. 8 pages. Publications Sales Unit, Export House, 50 Ludgate Hill, London EC4M 7HU.

Marine Division

Accidents at sea causing oil pollution: review of contingency measures. 1978. 40 pages. Department of Trade, Marine Division, Sunley House, 90-93 High Holborn, London WC1V 6LP.

Deck officers in the UK Merchant Navy: certificates of service. 1978. 8 pages + poster. Department of Trade, Marine Division, Sunley House, 90-93 High Holborn, London WC1V 6LP.

Merchant shipping notices:
M831: stowage of iron and steel cargoes. 1978. 7 pages.
M854: navigation safety. 1978. 8 pages.
Department of Trade, Marine Library, Sunley House, 90-93 High Holborn, London WC1V 6LP.

National Maritime Institute. Anglo-French Safety of Navigation Group. Study of marine traffic in the English Channel, June 1977. 1978. (NM1 R42), 60 pages. Department of Trade, Marine Library, Sunley House, 90-93 High Holborn, London WC1V 6LP.

Department of Prices and Consumer Protection

Metrology, Quality Assurance and Standards Division

International organisation of legal metrology. International recommendation no. 26: medical syringes. Official translation into English made by the United Kingdom government. 1978. 11 pages. £2.10. Department of Prices and Consumer Protection, Metrology, Quality Assurance and Standards Division, Room 301, 26 Chapter Street, London SW1P 4NS.

Fair Trading Division

Proposed provisions of an order to control the use of VAT-exclusive prices. 1978. 3 pages. Department of Prices and Consumer Protection, Fair Trading Division, Room 1923, Millbank Tower, Millbank, London SW1P 4QU.

Departments of Industry, Trade and Prices and Consumer Protection

Common Services

Economics and Statistics Division

Monthly review of external trade statistics no. 34, July 1978. [142 pages.] £3.00. Publications Sales Unit, Export House, 50 Ludgate Hill, London EC4M 7HU.

Department of Energy

Energy management. Published monthly. July 1978. 8 pages. Energy Management, Room 1395, Thames House South, Millbank, London SW1P 4QJ.

Price Commission

Guidance note 1/78: Price control system 1978. 24 pages.
Guidance note 2/78: Smaller firms and professional, construction and distributive firms. 9 pages.
Price Commission, Enquiry Unit, Market Towers, 1 Nine Elms Lane, London SW8 5NQ.

Departmental items published by HMSO are listed in the free catalogue 'Trade, industry, energy, prices and consumer protection' (sectional list no. 3) available on written application from HMSO, PO Box 569, London SE1 9NH or to personal callers at any government bookshop.

Time Rates of Wages and Hours of Work

A volume of tables giving particulars of the minimum, or standard, time rates of wages for the more important industries and occupations, and of the normal weekly hours for which these rates are payable. The details given relate to the position as at April 1, 1977, but any later changes known to have come into operation are shown.

£6.25 (by post £6.57½)

Government publications can be bought from the Government Bookshops in London (post orders to PO Box 569, SE1 9NH). Edinburgh, Cardiff, Belfast, Manchester, Birmingham and Bristol, or through booksellers.

HMSO BOOKS

Investing in Britain

From this week, 'Trade and Industry' begins a new, regular feature on investment in the UK by British and overseas firms. This week's review covers companies from the United States, Canada, Switzerland and Scandinavia. On the home front, meanwhile, we look at investment by British companies in England and Scotland.
News for inclusion in this feature should be addressed to: The Editor (Investing in Britain), Trade and Industry, Room 439, 1 Victoria Street, London SW1H 0ET.
Advertisers who wish to be associated with the feature should contact Terry Day on 01-242 9478 (or, in the north, Alan Loftus on 061-766 2191).

MacMillan Bloedel announces £15m project in UK

MacMillan Bloedel Containers Ltd of Watford, Herts, has announced a £15 million capital expenditure plan to expand and update its capacity in the UK. The company is a wholly owned subsidiary of MacMillan Bloedel Ltd of Vancouver and produces corrugated fibreboard containers in the UK.

The main features of the programme announced by the managing director, Mr R. B. Adamson, include the adoption of the latest high-speed continuous-run corrugator techniques, as well as the installation of additional new technology case-making, printing and die-cutting equipment.

The capital expenditure programme, which embraces the company's six UK plants—located at Hatfield, Herts; Southall, Middlesex; Weston-super-Mare, Avon; Nelson, Lancs; West Auckland, Co Durham, and Irvine, Scotland—is already underway and is planned for completion by 1982. A further £6 million has been earmarked for the construction of a new plant.

GM expands AC Delco plant

General Motors is putting another £5 million into its AC Delco motor components manufacturing business at Southampton.

The two-year programme involves a £4.3 million project to rationalise and consolidate existing facilities while increasing output of oil filters from 13 million units to 20 million. A further £800,000 is being spent on expanding the injection-moulding facilities by 50 per cent, improving plant heating and on an energy conservation programme.

Duni Bila to manufacture at Runcorn

Duni Bila Ltd, a wholly owned subsidiary of the Swedish company Billingsfors AB, has negotiated a lease of 30 000 sq ft of factory, warehouse and office accommodation at Runcorn, near Liverpool, with an option of 12 acres of development land. The company first established a sales and distribution office in the UK in 1965.

The Runcorn production unit will manufacture disposable tableware and is expected to build up a workforce of some 300 over a five-year period.

Leading the government's continuing activity to encourage and facilitate investment from overseas is the Department of Industry's Invest in Britain Bureau, which deals with all aspects of bringing new manufacturing investment into the UK. Further information about the work of IBB is available from 01-211 5762.

Papropack picks Warwick

Papropack (Midlands) Ltd opened a new factory on the Wedgenock industrial estate at Warwick earlier this year.

Manufacturer of multiwall paper sacks, the company is owned by Oy W. Rosenlew AB, one of Finland's biggest companies, and Fiskeby AB, which is part of the Kooperativa Forbundet, the Swedish co-operative movement.

The new £½ million factory produces 30 million sacks a year. With 200 employees and a turnover of nearly £7 million, Papropack expects to expand further into other areas of packaging, using extremely large woven polypropylene fabric containers, and into wall ties used by the building industry.

Managing director Mr J. M. Simpson sums up the British advantages as 'lowest labour and social costs anywhere in Europe, very generous development area grants, and a stable political scene'.

Swiss company plans to expand

Charmilles (UK) Ltd established its Gloucester factory in 1973 as the parent company's first manufacturing subsidiary outside Switzerland. Since then, the size of the plant has been expanded by 50 per cent and the company plans to extend further over the next two years.

Charmilles took over the nucleus of a workforce of a factory which was in the process of closing down, and trained it in its production methods.

'Productivity is as good as that of our Swiss colleagues, but we have the advantage of lower costs,' claimed managing director Gordon Smith. Charmilles' British-made machines meet the precision requirements of Swiss manufacturing standards with complete consistency and they are sold to all major European countries, the United States, Australasia, and the third world. Something like 80 per cent of production is exported but Mr Smith has seen encouraging signs of an upturn in UK industrial investment this year and this has been reflected in his company's sales.

Gloucester is an excellent communications centre, Mr Smith claims. His company sends all production directly to Geneva or to customers in the UK. This avoids the necessity for off-loading en route.

Second factory for GEC Computers

GEC Computers Ltd has completed negotiations for the occupancy of a new factory building at Eyncourt Road, Woodside Estate, Dunstable.

As soon as fitting-out work at the premises is sufficiently advanced the Dunstable factory will start final assembly and commissioning of computer systems before delivery. Assembly and test of the individual units for computer systems will also be undertaken at Dunstable in the near future. It is intended that the site will eventually house a full manufacturing capability.

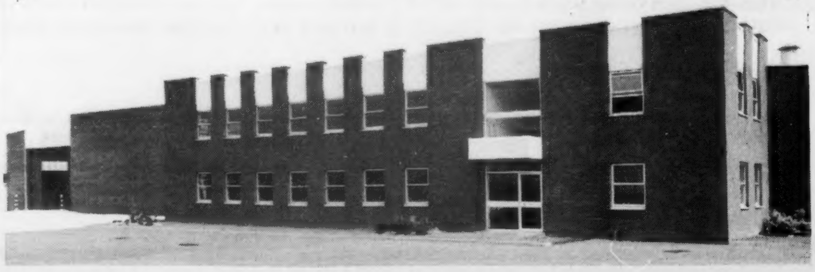
New jobs will be created at Dunstable for electronics engineers, test technicians, commissioning engineers, wiring operators, quality control inspectors, and support staff.

The new factory will double the company's capacity for the production of the GEC 4000 series of computers. To cater for still further expansion, the company has also taken an option on an adjacent factory building at present under construction.

Wedgwood plans £6m expansion

Directors of the Wedgwood Group have announced that they have decided to bring forward their latest expansion plan for a major increase in the output of fine bone china at the Wedgwood factory, Barlaston,

GEC Computers' new factory at Eyncourt Way, Woodside industrial estate, Dunstable, Bedfordshire.



and the reorganisation and improvement of the production facilities for fine earthenware and oven-to-tableware.

The group's Alexandra factory in Tunstall, and the Hanley factory of J. and G. Meakin will be modernised and reorganised. Scheduled to start in September, the building programme is planned to be completed in two years; towards the final cost of £6 million, a grant of £1.2 million has been approved under the Department of Industry's selective investment scheme. The developments will streamline production techniques and create further job opportunities (an estimated 300 new jobs when the project is completed).

The previous £7.5 million factory expansion scheme – to which the department contributed £1.3 million – was begun in September 1976 and is now nearing completion. So far, that programme has increased the group's overall production capacity by about 30 per cent.

Ferranti leases Bellshill factory

Ferranti Ltd will shortly sign a lease with the Scottish Development Agency for a 20 000 sq ft factory near Glasgow.

The Ferranti Scottish Group plans to recruit technically qualified people in order to build up an electronic design and development capability at Belshill. People initially being sought include computer programmers, draghtsmen and design and test engineers. Over the next two-year period it is hoped to provide 160 jobs.

RDL's £1.5m modernisation plan

A modernisation programme costing more than £1.5 million was announced on 22 August when Gregor MacKenzie, Minister of State at the Scottish Office with responsibility for industry, paid a visit to the Westburn, Cambuslang, works of Redpath Engineering. The modernisation plan involves reorganisation of the work flow in the fabrication shops and the installation of a second computer-controlled saw and drill line, an automatic punch and crop line, automatic plate-cutting and painting equipment which would improve the productivity potential of the plant and bring it up to the most modern standards.

Redpath Engineering's Glasgow branch headquarters is at Westburn and in total employs about 1620 people, the majority of whom work at Cambuslang, the remainder at Glengarnock, Manchester and Warrington. The order book of the branch is presently worth in excess of £5.5 million and steel fabrication in progress at Cambuslang includes structural engineering work for Rosyth naval dockyard, a papermill in Workington, Cumbria, and for jumbo jet hangars at Heathrow Airport.

Cooke Converters streamlines foil-laminates production

Henry Cooke Converters Ltd of Garstang, Lancs, is continuing its substantial programme of plant re-development with reconstruction of the laminate-feed section for the no. 3 extrusion coating line.

The unit will facilitate the manufacture of very high-quality laminate materials, particularly products manufactured with aluminium foil as one of the substrates.

The range of industrial wrapping and general packaging products will also be extended as more complex constructions come on stream.

Other major improvements being carried out at the same time are designed to improve speed and output of products generally, and in due course will be augmented by further development of the coating and finishing plant.

Henry Cooke Converters Ltd, which specialises in extrusion coating and laminating, is part of the paper and converted product division of J. Bibby and Sons Ltd.

Burnt Hill Electronics builds at Aldershot

Burnt Hill Electronics Ltd of Aldershot, designer and builder of computers and computer systems for process control and automatic test applications, has added 5000 sq ft to its workshops. The move, completed on 10 July, will accommodate expanded production of all company products, including the new BH 604-5 accounting system.

The expansion of Burnt Hill's premises will also house new engineering and design staff brought onto the strength as a result of the current recruitment programme. New staff will concentrate initially on the company's 'systems' operation accounting for approximately half the present turnover.

Government sales

27 September 1978 – Miscellaneous

Location:
The Bristol Eurocrest Hotel, Filton Road, Hambrook, Bristol

Auctioneers:
Russell Baldwin and Bright (Dept L), 20 King Street, Hereford HR4 9DB
(0432 55441)

Stores lying at Hereford and other depots including furniture, carpets, clothing, blankets, machine tools, electronic and electrical spares, MT spares, petrol engines, fork lift trucks and 7 vehicles.

Catalogue price 40p, postage 15p.

30 September 1978 – Furniture

Location:
RAF Lindholme, Doncaster, South Yorkshire

Auctioneers:
Bartle and Son (Dept ?), 1a Bridge Street, Tadcaster, North Yorkshire
(0937 835303)

The sale consists of mainly small or single item lots of furniture.

Catalogue price 20p, postage 10p.

Catalogues, which give details of the lots, conditions of sale, viewing times etc, are available from the auctioneer from two weeks before and up to the day of the sale.

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New publications

Cotton-on to safety

'Dark satanic mills' may have passed, but the risks of injury during fabric production remain. A recent booklet reminds us that with adequate safeguards risks can be minimised. Safety precautions – mainly in the nature of guards and shields for moving machinery – are usually fairly simple to execute.

This substantial booklet, part of the comprehensive 'Health and safety at work' series, is based on the wide experience of HM factory inspectorate, with aid from representatives of the cotton and allied fibres industry and from others with specialist knowledge. The result is a clear and thorough explanation of likely dangers and of the measures necessary to ensure a satisfactory level of safety in woven and non-woven fabric production and in subsequent processes. The scope is wide, taking in cropping and shearing machines, knitting machines and plaiting machines.

Previous booklets in the series deal with opening, carding, spinning and other processes.

Well laid-out and profusely illustrated with detailed drawings depicting not only satisfactory installations but also dangerous assemblies and inadequate modifications to machinery, this publication exudes an air of professionalism. Its one weakness is that it was prepared before the Health and Safety at Work Act 1974 came into force and consequently no reference is made to the act and its requirements. Intended for manufacturers of machines as well as for the industry itself, the booklet acquits itself admirably in its purpose of explaining and illustrating the dangers arising from machinery and the methods of eliminating or reducing these dangers.

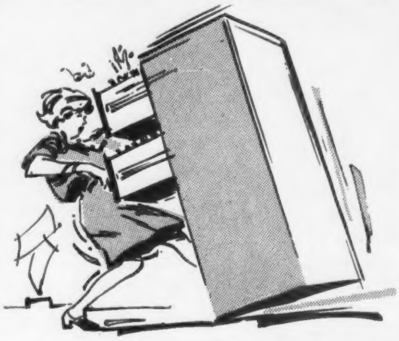
Safety in the cotton and allied fibres industry: fabric production, Health and Safety Executive. HMSO. 1978. 60 pages; paperback, 60p (ISBN 0 11 883078 3).

Safety means you

Every year, thousands of men and women are hurt in accidents at work which could have been prevented. A carefully considered safety policy, conscientiously implemented, helps to avoid accidents, contributes to smoother production and reduces the likelihood of human misfortunes and general inefficiency.

Employers have a responsibility to provide appropriate instruction and training in health and safety, under the Health and Safety at Work Act 1974. This handbook, produced primarily, but not exclusively, for use in government offices, sets out to provide a means of achieving this, simply and effectively. Its message is intended to stimulate action not only on the supervisory level, but also among the workforce as a whole, through encouraging a greater awareness of safety. The handbook therefore identifies possible hazards in offices, and suggests action advisable for their avoidance.

Well-organised and presented, with drawings to break up the text, this short guide covers all the main aspects of office safety: fire, electricity, machinery, office layout, load-carrying, and healthy conditions.



Is my office safe? A handbook for supervisors, Civil Service Department and Training Services Agency. HMSO. 1978. 22 pages; paperback, 50p (ISBN 0 11 630223 2).

Do you see?

Flying objects, dust, chemicals, radiation – all these can put one's eyesight at risk. Serious loss of vision or even blindness can result from what appear to be only trivial injuries. Such warnings cannot be given too often particularly to those in industry. So it is good to welcome a short booklet, produced to assist companies in their responsibilities to provide safe working conditions.

Readers requiring copies of any of the publications mentioned on this page, should contact a bookseller or the publisher given at the end of each review. No requests for copies should be sent directly to *Trade and Industry*, unless otherwise stated.

The booklet discusses various hazards to eyes, and outlines the principles involved in providing the necessary protection and in selecting appropriate equipment.

Other topics covered include legal obligations, maintenance of equipment, training of employees, and pre-employment examination. An interesting section discusses the wearing of contact lenses which are not recommended where there is any risk of eye injury from chemicals, whether in the form of vapour, liquid or dust.

Useful appendices deal with legal requirements in more detail, the treatment of eye injuries, and the British standards for eye protection.

Altogether, this is a helpful introduction to the question of eye protection, but it confines itself to outlining the general principles involved. It is not an exhaustive manual but provides a framework within which management can develop its own protective measures.

Protection of the eyes, Chemical Industry Safety and Health Council of the Chemical Industries Association. CIA Publications, 93 Albert Embankment, London SE1. 1978. 16 pages; paperback, £2.00 (£1.50 to CIA member companies) including postage.

A library for exporters

Trade and other economic statistics from almost every country in the world, including the UK, are available for reference in the Statistics and Market Intelligence Library at Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 ext. 368/369, telex 886143 (DTI Export LDN). A modern well-equipped library of over 100 000 volumes, it has a public reading room equipped with microfiche readers and photocopying facilities. Among the documents available are foreign trade directories covering some 170 countries and selected trade fair catalogues.
The library is open from 09.00 to 17.30, Monday to Friday (last passes for the building are issued at 17.15).

In peril on the sea

Statistics published annually in 'Casualties to vessels and accidents to men' (HMSO, £1.75) reveal that the number of accidents to men at sea has dropped noticeably in recent years. However, every accident is one too many and so any new attempt to deal with the problem is to be welcomed. The International Labour Office has recently been looking at this question and 'Accident prevention on board ship at sea and in port' is the outcome of their work.

This is a code of practice drawn up as a result of a meeting of some of the world's leading experts on marine affairs. It outlines the dangers facing seamen and the procedures to avoid them. Each chapter covers a different aspect of life at sea, from working with boilers and machinery, to combustible liquids and gases, and from the problems associated with anchoring and mooring to the general hazards of working in a confined space and coping with the liability to sudden movement. Being a code of practice, it is not intended to be readable. It is, however, very clearly presented and compactly produced.

Accident prevention on board ship at sea and in port, International Labour Office, 87/91 New Bond Street, London W1Y 9LA. 1978. xi, 188 pages; paperback, £3.90 (ISBN 92 2 101837 7).

Technology news

SWP to study 1980s computer industry manpower needs

The manpower implications of the developing UK computing industry into the mid-1980s is to be the subject of a study by the electronic computers sector working party of the National Economic Development Office. The £30,000 study will be carried out through the SWP's manpower sub-committee by the Institute of Manpower Studies aided by the science policy research unit of the University of Sussex.

The project is intended to find out what, by the mid-1980s, will be the likely requirements in the UK of computer manufacturers, computer users, software manufacturers and other support industries for manpower with computer-related skills and qualifications, and the principle factors influencing that requirement.

It will look into the type and level of the required skills and qualifications and what would be the likely national stock of people having such skills and qualifications, and how they would be distributed. The measures which would need to be introduced in order to minimise the likelihood of serious manpower shortages or surpluses in the mid-1980s will be examined.

For a variety of reasons, the present structure of the computer industry is likely to undergo considerable changes by the mid-1980s. Accordingly, medium-term projections of manpower requirements based on simple extrapolation of today's industry structure and manpower pattern are unlikely to be satisfactory. The study will aim to assess the new profile of the sector and users of its products in the mid-1980s, by an exhaustive examination of the principal factors most likely to generate change. On the basis of those findings, and of a subsequent programme of structured research, it will derive an appropriate manpower profile.

The profile will point up the need for education and training and will enable the SWP to assess whether existing and planned arrangements are likely to be able to satisfy those perceived needs. A major policy objective in this period will be to improve the competitive performance of a wide range of activities associated with the manufacture and use of computer technology in the UK, and the availability of appropriate skilled manpower is crucial to the achievement of that objective.

Finance for technology

The National Research Development Corporation provides financial and other support for technological developments of potential commercial importance. NRDC promotes the adoption by industry of new products and processes invented in government laboratories, universities and elsewhere. Further details are available from the National Research Development Corporation, Kingsgate House, 66-74 Victoria Street, London SW1.

Maritime simulation for all weathers and all times

A powerful all weather – day, night and twilight – ship simulator, a combination of Decca Radar Ltd's ship simulator bridge and Marconi Radar Systems Ltd's visual display system, has been developed under Department of Industry sponsorship. The principal features of the Decca-Marconi ship simulator are its full-mission capability, its realism, its extreme flexibility and its simplicity of operation. Transition from daylight through dusk to darkness is realistic and navigation and flashing lights can be shown including general coastal and port lighting. Visibility can be varied from unlimited to thick fog.

The Decca ship simulator with a night view scene has been successfully in use at the Southampton College of Nautical Studies at Warsash for over a year, where more than 250 officers from 18 shipping companies have already attended courses. It shows a night time view of the ship's bow and the coloured lights of navigation marks and other ships. The lights seen move correctly as the ship manoeuvres in response to wheel and engine and are accurately co-ordinated with echoes on the radar display, with Decca Navigator readings and bridge instruments.

The Tepigen visual display system developed by Marconi Radar has already proved its success at home and overseas with contracts for gun and guided weapon aimer trainers and is a vital part of a new range of flight simulators. The system to be used as the 'all-weather' visual part of the Decca-Marconi ship simulator uses life-like projected colour television pictures to simulate the actual visual conditions obtaining from the bridge throughout the course of an exercise. The television pictures are synthesized wholly from a computer without the use of tv cameras, models, video tape or film.

Scenery produced by this method can be manipulated freely and quickly to give a view which changes as the ship alters its heading and position. The size, location, orientation, visibility and colour of objects in the scene are controlled by the computer in response to the details set up for that particular exercise, and are fully interactive with the ship's manoeuvres in response to helm and engine demands. Moving objects such as other ships, from pilot vessels to very large tankers, can be included in the 'playing' area and can be under the control of an instructor; the scene details can include buoyed channels, approaches to real ports, coastlines or open sea.

Seed blocks for future transplanter systems

Ten thousand soil blocks each containing a seed can be produced in one hour by a prototype machine developed at the National Institute of Agricultural Engineering, Bedford. It prepares seed blocks in bandolier-type carriers which are ideally suited to the automatic transplanter feed systems envisaged for the 1980's.

Experiments in the UK and overseas have shown that the performance of hand-fed transplanters has been disappointing. Methods devised to semi-automate them, in which an unmanned transplanter feeds from previously hand-filled magazines, simply transfers the labour demand from the field to the packing shed.

The institute has devised the experimental blockmaker which rapidly forms blocks from dry compost, injects a measured amount of water into each, wraps them between two paper or plastic strips and places a seed in a depression formed in the top of the block. The cylindrical blocks of seed containing soil are arranged in a bandolier fashion to avoid separating each of the plants by hand. This method of packaging also offers an ideal feed system for transplanters of the future.

Seed blocks in bandolier for automatic planting.

Joint development welds wear-resistant rails

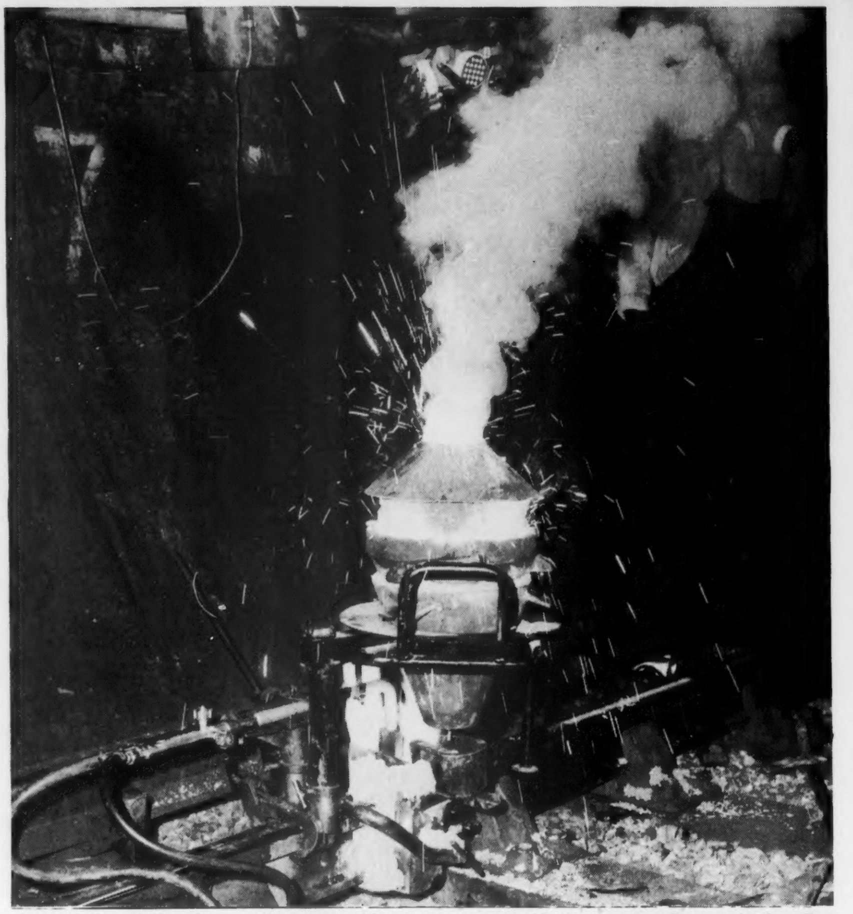
Rails made from the most wear-resistant steel currently specified for railway line manufacture can now be continuously welded to cut maintenance costs and produce smoother, quieter riding for passengers. As a result of a joint development programme between British Rail, the British Steel Corporation and collaboration with two specialist welding firms, a significant new development in rail steel technology enables the benefits of continuously welding rails into long lengths to be exploited on sharply curved lines whilst minimising the need to renew frequently the worn rails.

The work has involved producing a weldable version of the most wear-resistant of rail steels, Hadfield's austenitic manganese steel, and developing the welding techniques necessary to produce reliable joints. The first installation using the new development has been made in conjunction with the chief civil engineer of British Rail's eastern region in the tunnels of London's great northern suburban line. After five months of intensive service on this busy commuter railway, there has been no detectable change in rail profile of over half-a-mile of sharply curved rails. Previously, despite the use of rail lubricators, rails made of normal rail steel were having to be renewed after very short periods of service.

Severe rail wear produced by the friction between wheel and rail surfaces can be a major problem on sharp curves and special high wear-resistant steels are used to manufacture rails for use in such locations. The most successful commercially available high wear-resistant rail is made from austenitic manganese steel. Two properties have, until now, prevented this steel from being used in continuously welded track.

First, the heat applied during the welding process gives the steel more brittle characteristics. Secondly, the material's much higher coefficient of expansion compared with the pearlitic steels normally used creates excessive stresses as the rail expands and contracts with changes in temperature. This is not a problem, however, in locations where ambient temperature change is small, such as in long tunnels.

The first problem has now been overcome as a result of a joint development project between British Rail's research and development division at the railway technical centre, Derby, and the British Steel Corporation's Workington works. This has resulted in the production of a weldable version of Hadfield's austenitic manganese steel and further collaboration involving two specialist welding firms, AI Welders of Inverness and Thermit Welding (GB) Ltd of Rainham has resulted in the development of suitable welding procedures.



Thermit (R) welding of low-carbon austenitic manganese steel in the great northern suburban line tunnel where the new development was first tried.

Microprocessors in non-destructive testing

A one-day briefing on 'the future role of microprocessors in non-destructive testing' for managers concerned with the manufacture or application of ndt equipment is being organised jointly by Sira Institute Ltd and the Non-destructing Testing Centre, Harwell. The meeting will be held on 23 November at AERE, Harwell, Didcot, Oxfordshire. It will provide an introduction to microprocessors and their potential role in non-destructive testing, and will illustrate how they are already being applied in equipment used off-line and in on-line systems.

A group of speakers will set the scene in a number of formal presentations, which will aim both to inform and to generate constructive questions and discussion. They will explain how to improve existing products or design new ones by taking advantage of the microprocessor's capabilities. The team of speakers will include Harwell specialists in ndt instrumentation and Sira specialists in the application of microprocessors to measurement and inspection equipment.

A speaker from industry will describe a current application and a speaker from the Department of Industry will explain government schemes for the financial support of microprocessor application projects. The topics will be treated in such a way as to be intelligible to those who may have read about microprocessors but who have no firsthand knowledge of them.

The total number of those attending will be limited to about 60 to ensure maximum audience participation. Further information may be obtained from Mrs R. Keiller, Sira Institute, South Hill, Chislehurst, Kent BR7 5EH.

Rebates to encourage use of sugar for fermentation

The Chemical Industries Association, in cooperation with the European Chemical Federation, has negotiated up to £1 million worth of rebates from the EEC commission to encourage British firms to use sugar as a nutrient to feed their micro-organisms, which make chemical fermentation possible. This will enable the EEC's surplus 'sugar mountain' to be used by the British chemical industry to produce vitamins, antibiotics like penicillin, and a wide range of food chemicals.

Fermentation is a well-established manufacturing process, being the basis of bread baking and beer brewing, for example. The chemical industry now uses the process for a wide range of products. Penicillin is produced in this way, as are the tetracyclines and vitamin B12. Some micro-organisms can thrive only on a specific nutrient, like sugar, starch or molasses. Others do well on any of these.

The rebates are to compensate firms for the difference between the EEC price of sugar and the world price. In addition, a production refund will further encourage the use of sugar as a nutrient feedstock. The EEC estimates that sugar consumption by the UK chemical industry will rise, as a result of the rebates, from 77 000 tonnes last year to 94 000 tonnes this year.

New products

Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

Improved pump range has modular construction

Sykes Pumps Ltd has introduced the Super Univac range of solids-handling automatic vacuum-priming centrifugal pumps. The Super Univac is of modular construction with interchangeability of many of its components. This feature offers the ability to fit alternative impellers as requirements change, while the use of a bearing pedestal makes the fitting of alternative prime movers a relatively simple matter.

Other benefits claimed include simplified maintenance and reduced site costs, minimum downtime and ease of operation. The pump is also of smaller dimensions than former models, making it easier to transport and to move around on site.

Super Univac pumps are being manufactured in five sizes. Approximate performance rates based on a total head of 6 m give from 43 m³/h to 457 m³/h. The total head of these pumps at 75 per cent of full flow is between 13 m and 21 m according to model. All pumps are designed to operate at static suction depths of 9.14 m.

While the pump was designed primarily for use with a standard range of diesel engines, the coupling has been designed to allow a variety of prime movers to be used, with changeover effected on site if required. The smallest version is fitted with a Petters AC1 as standard, the next two have Lister ST engines and the remainder are equipped with Lister engines of the HR range.

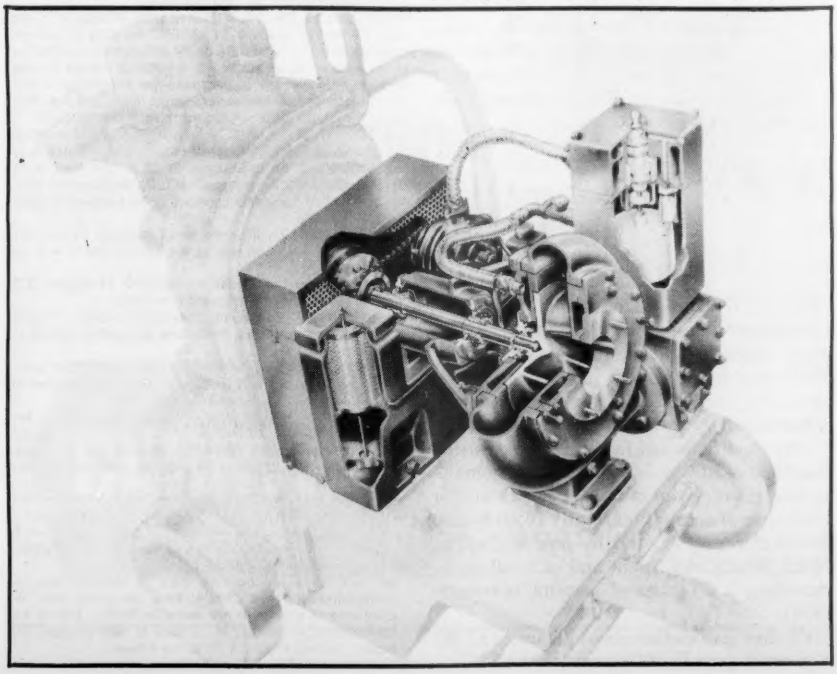
The Super Univac remains a solids-handling pump, although its basic specification can be changed by fitting a different impeller to suit the particular characteristics of the fluid being handled and total head requirements. One of its most important features, however, is its self priming facility induced through the back of the impeller. The exceptional efficiency of this method enables the same vacuum pump to handle twice the amount of air as with the former front priming Univac.

Apart from increasing its efficiency over its full range of duties such as wellpoint dewatering, the handling of raw sewage, sludges, slurries, effluents and pulps, back priming makes it especially suitable for handling gaseous sludges and similar materials normally regarded as difficult to pump. The gases contained in such liquids are extracted at the centre of the impeller as they become separated out by centrifugal action.

The pumps are mounted on an all steel chassis which incorporates the fuel tank. This is also designed to a modular concept so that it may be fitted with skids, wheels or arranged as a high speed trailer. In its four wheeled form the front wheels have Ackerman type steering and the drawbar can be folded away to avoid the possibility of damage on site. Where noise restrictions are in force the unit lends itself to the fitting of an acoustic canopy to the prime mover only.

Further information: circle 154

The main components and vacuum operated back priming system of the Super Univac pump.



Meter eases grain moisture measurement

A system for measuring moisture in grain, developed by Protimeter Ltd, incorporates 50 reader rings instead of the usual pointer moving across a scale. Each ring is not only individually calibrated to register the moisture level of a different grain crop but is also designed to take into account the effects of different oven-drying methods.

The Grain Mini mk. II system replaces conventional types that could give different moisture contents under certain conditions. It displays the moisture level clearly on the appropriate reader ring, and the reading remains stationary and clearly visible until the instrument is set for taking another measurement. A further advantage is that the error from misreading multi-scaled instruments is eliminated since each grain type has its own individual ring-scale.

Three light-emitting diodes indicate when both sample and ring-scale are ready for taking a reading. Clear instructions are given on the face of the instrument, which make it virtually impossible to overlook the vital fact of allowing temperature variations. It is powered by a 9 V dry battery and incorporates its own thermometer.

Further information: circle 155

Rivet-extrusion pin-breaks monitored electronically

An electronic monitor to stop tubular-rivet making machines automatically if their extrusion pin breaks has been developed by the west Midlands Low Cost Automation Centre. This is a prime example of how the centre is helping industry not only by applying engineering and design expertise to the direct solution of production problems but also by providing work for local companies through sub-contracting equipment manufacture.

Extrusion pins on rivet-making machines are subjected to considerable stresses while extruding the hollow centres of rivets. Pin breakage can often be frequent and is almost always unpredictable. If not noticed promptly, this results in a large quantity of scrap rivets, wasted raw material and lost production time. With the extrusion pin monitor, via a single sensor attached to the rivet-making machine, any breakage of the extrusion pin is instantly detected and the machine stopped.

The West Midland Low Cost Automation Centre is based in the department of engineering production at the University of Birmingham. It specialises in inspection, gauging, machine control and micro-processor applications. Where a project for a customer results in equipment with a more general application, the centre will sub-contract its manufacture.

Further information: circle 156

European community news

Fedetab agreements broke competition rules

Fedetab – Federation Belgo-Luxembourgeoise des industries du tabac – has been told by the European commission to stop infringements of rules of competition article 85 of the treaty of Rome, if it has not already done so. The commission had found that infringements were committed between 1962 and 1975.

The commission's decision follows applications received from GB-Inno-BM SA on 2 April 1974 and from SA Mestdagh Frères and Co and SA Eugène Huyghebaert on 21 October 1975 for the initiation of proceedings.

The applications referred to certain decisions taken by Fedetab, to agreements concluded between Fedetab and other trade associations in the manufactured tobacco industry, as well as certain decisions by cigarette manufacturers who are members of Fedetab. These included the approval and classification by the federation of wholesalers and retailers into different categories in order to allocate varying profit margins, and the maintenance of resale prices by manufacturers, and resale prohibitions.

In addition, the applications referred to a Fedetab recommendation, notified to the commission on 1 December 1975 for cigarette sales in Belgium, in accordance with articles 2 and 4 of regulation 17. This recommendation also included the division of wholesalers and retailers into categories, as well as the granting of end-of-year rebates to such firms.

The commission concluded there had been an infringement of article 85(1) between 13 March 1962 and 1 December 1975 and that the recommendation notified to the commission by Fedetab – and seven other undertakings wishing to be a party to it – also constituted an infringement of article 85(1) and did not qualify for exemption under article 85(3).

Further information can be obtained from the Department of Prices and Consumer Protection, Millbank Tower, London SW1P 4QU, tel. 01-211 7037. The commission decision, dated 20 July 1978, was published in *Official Journal of the European Communities* L224/29, 15 August. Reference 78/670/EEC Federation Belgo-Luxembourgeoise des industries du tabac (Fedetab) (references DGIV 28.852, IV/29.127 and IV/29.149).

More community news

Information on European community matters and about member states can often be found in other sections of *Trade and Industry*. For this week's additional news, turn to the following pages:

Technology news
Rebates to encourage use of sugar for fermentation 542

Overseas trade news
British hi-fi at German audio fair 548

Country data
United States: speciality steel 550

Statistics
Economic indicators of industrial countries 553
UK trade in the second quarter 561
Tourism 570
Registrations of films 583

Vinyl acetate dumping investigations

An anti-dumping investigation has been opened by the European commission following information received indicating that dumping is being practised or that bounties or subsidies are being granted in respect of imports of vinyl acetate originating in the United States and that this is causing injury to a community industry. Tariff heading 29.14 AII.

Views (in writing) should be submitted to the Commission of the European Communities by 20 September and copies sent to the Department of Trade's anti-dumping unit at Kingsgate House, 66 Victoria Street, London SW1E 6SJ.

Use of EUR2

Use by UK exporters of form EUR2 as an alternative to movement certificate EUR1 when exporting goods under certain conditions has the advantage that EUR2 does not have to be presented to Customs and Excise for endorsement.

The conditions are that the consignments should be of EEC goods only and are going to an Efta country and of a value not exceeding 1500 units of account (currently £650) by any means of transport, and by post to Cyprus, Israel, Malta and Spain and of a value not exceeding 1000 units of account (currently £420).

Further information about the use of EUR2 is given in part D of Customs notice 827.

New legislation

The legislation listed below has been published in the *Official Journal of the European Communities* as indicated against each item. The *Official Journal* is published in English and copies should be obtained from HMSO. Information about the items listed, in so far as other members states' requirements are concerned, is available to British exporters from Department of Trade, Export Services and Promotions division, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 ext. 7174/482/408.

Common agricultural policy

The texts of the following regulations, decisions and directives which affect the various agricultural sectors in the EEC have been published in the *Official Journal of the European Communities*:

Animal feedingstuffs. Directive 78/633/EEC establishing community methods of analysis for the official control of feedingstuffs (*Official Journal* L206, 29 July 1978).

Seeds and plants. Decision 78/661/EEC amending fifth decision 76/539/EEC on the equivalence of seed produced in third countries (*Official Journal* L223, 14 August 1978).

Decision 78/662/EEC amending fifth decision 76/538/EEC on the equivalence of field inspections carried out in third countries on seed-producing crops (*Official Journal* L223, 14 August 1978).

Wine. Regulation (EEC) 1972/78 laying down detailed rules on oenological practices (*Official Journal* L226, 17 August 1978).

Animal health. Decision 78/685/EEC establishing a list of epizootic diseases in accordance with directive 72/462/EEC (*Official Journal* L227, 18 August 1978).

Harmonisation of legislation

Motor vehicles. The *Official Journal* L206, 29 July 1978, contains the text of directive 78/632/EEC adapting to technical progress directive 74/60/EEC on the approximation of the laws of the member states relating to the interior fittings of motor vehicles (interior parts of the passenger compartment other than the interior rear-view mirrors, layout of controls, the roof or opening roof, the backrest and rear part of the seats).

The *Official Journal* L223, 14 August 1978, contains the text of directive 78/665/EEC adapting to technical progress directive 70/220/EEC on the approximation of the laws of the member states relating to measures to be taken against pollution of the air by gasses from positive ignition engines installed in motor vehicles.

Further information: Department of Industry, Vehicle Division, Abell House, John Islip Street, London SW1P 4LN, tel. 01-211 5658.

Food standards. The *Official Journal* L223, 14 August 1978, contains the texts of the following directives:

Decision 78/663/EEC laying down specific criteria of purity for emulsifiers, stabilisers, thickeners and gelling agents for use in foodstuffs.

Directive 78/664/EEC laying down specific criteria of purity for antioxidants which may be used in foodstuffs intended for human consumption.

Further information: Ministry of Agriculture, Fisheries and Food, Food Standards Division, Great Westminster House, Horseferry Road, London SW1P 2AE, tel. 01-216 6120. Copies of *Official Journal* L223, may be obtained from HMSO, Price £1.20.

Dehydrated preserved milk. Directive 78/630/EEC amending for the first time directive 76/118/EEC on the approximation of the laws of the member states relating to certain partly or wholly dehydrated preserved milk for human consumption by adding the following to article 3 (2):

> (d) 'Geëvaporeerde halfvolle melk' in Belgium and the Netherlands and 'lait demi-écrémé concentré' and 'lait demi-écrémé concentré non sucre' in Belium, France and Luxembourg, to denote, in the case of sale by retail, the product defined in point 1 (c) of the Annex'.

(*Official Journal* L206, 29 July 1978).

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Overseas trade news

Peking fairs expected to attract 300 000

Two exhibitions organised by the British Overseas Trade Board in Peking this autumn are expected to attract more than 300 000 visitors to see advanced British technology in agricultural machinery and scientific instruments.

From 20 October to 3 November at the agricultural machinery exhibition – the first international trade fair to be held in China – 18 companies will exhibit in the British pavilion. A wide range of British equipment and products relevant to China's agricultural development will be shown including tractors, irrigation equipment, spraying machines, hydraulic equipment, cultivators, sugar beet harvesters, shearing and clipping equipment, fertilisers, insecticides and vaccines. A seminar will also take place concurrently with the exhibition.

From 16 to 25 November, 47 firms will participate in the first all-British scientific instrument exhibition in Peking organised by the British Overseas Trade Board and sponsored by the Scientific Instruments Manufacturers Association. Among the items on display will be a scanner X-ray diagnostic system, control valves, microwave instrumentation, electrophysiological measuring systems, testing machines, image analysis systems, laboratory equipment, printing machines, spectrometers and diamond tools. At a seminar, which will run simultaneously with the event, 27 exhibitors are offering 48 papers.

This year's event is a follow-up of the British machine tools and scientific instruments exhibition at Shanghai in 1975 and more than half of the companies who exhibited then will take part in the November exhibition.

Agreement has also been reached with China for a major British energy exhibition to be held in Peking from 5 to 15 June 1979. This event will be of interest to British manufacturers in oil and gas exploration and processing, power generation and transmission, and other sectors of the energy industry. Exhibitors will also have the opportunity to present papers at a concurrent seminar. Companies wishing to take part should contact Industrial and Trade Fairs Ltd, Radcliffe House, Blenheim Court, Solihull, West Midlands, tel. 021-705 6707.

Other BOTB activities during the autumn to encourage Sino-British trade include six outward missions involving some 100 companies engaged in mining equipment, plant processing, railway equipment, steel and building. These missions are organised in co-operation with the Process Plant Association, the British Railways Board, the Association of British Mining Equipment Exporters, the London Chamber of Commerce and Industry and the British Steel Corporation.

Before the end of 1978 nine groups of Chinese specialists will also visit Britain. Their interests cover medicine, ferrous metals, coal mining machinery, ceramics manufacturing equipment and refractories. One of these delegations will be from the Research Institute of the Chinese Ministry for Foreign Trade, and another will consist of 12 research scientists who will spend three weeks in Britain.

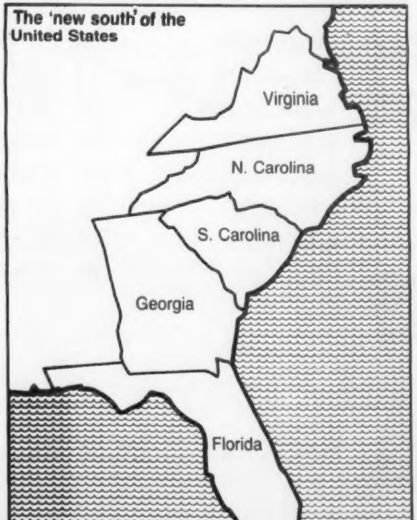
Seminars on the 'new south' of the United States

A series of three half-day seminars highlighting the export opportunities in the southern states of the United States is being sponsored by the north American advisory group of the British Overseas Trade Board. These states, specifically Virginia, North and South Carolina, Georgia and Florida are currently enjoying rapid economic expansion and present excellent opportunities for UK exports.

Manufacturing industry, which in this region traditionally meant the labour-intensive textile industry, has now diversified into electronics, chemicals, aerospace, electrical and non-electrical machinery, rubber, plastics, paper, food, and transportation equipment. The economic boom in this region has meant growth in the local construction industry, both in the industrial and residential sectors. Service industries such as banking, insurance and communications have also enjoyed rapid growth. All of this presents an encouraging outlook for potential exporters of a wide range of both industrial and consumer products.

The three seminars will expand these opportunities.

At the first seminar on 26 September at 1.30 pm at the Cafe Royal, Regent Street, London the chair will be taken by Lord Crichton-Stuart. Speakers will include: Jim Glenn, vice-president, First Union National Bank of North Carolina; Allan Grey, Consul (Commercial) British consulate-general, Atlanta; Robert Silverman, director of corporate development, LRC International, London; Denis Rufin, director for Europe, State of Virginia; Mike Reid, marketing director, LEP Transport Ltd, London.


The 'new south' of the United States

The second seminar will be held on 27 September at 1.30 pm at the Midland Hotel, Peter Street, Manchester where the chair will be taken by Sir Barrie Heath, group chairman, Guest Keen and Nettlefolds Ltd. Speakers will include: Jim Glenn, and Allan Gray, and also Desmond Hird, president, Angus Fire Armour Corporation, Angier, North Carolina; John Turbiville, European director, State of Georgia Department of Industry and Trade; Peter Wilson, Thomas Meadows Ltd, Manchester.

The third seminar will be held on 28 September at 1.30 pm at the Chimney Corner Hotel, Antrim Road, Newtownabbey, Co Antrim. The chair will be taken by Philip Foreman, managing director, Short Bros Ltd, and speakers apart from Jim Glenn and Allan Gray, will include Ian Thompson, managing director, Cable Belt Ltd, Camberley; David Bunn, European director, State of North Carolina; James Nolan, managing director, LEP Transport (Ireland) Ltd.

All the seminars are free of charge and further details can be obtained from: for the London seminar: Miss C. Murray, British Overseas Trade Board, North American Advisory Group, Room 429, 1 Victoria Street, London SW1H 0ET, tel. 01-215 3364; for the Manchester seminar: Mr G. Cobb, Department of Industry, Exports Branch, Sunley Building, Piccadilly Plaza, Manchester M1 4BA, tel. 061-236 2171 ext. 550; for the Belfast seminar: Mr M. Patterson, Department of Commerce, Chichester House, 64 Chichester Street, Belfast BT1 4JX, tel. Belfast 34488 ext. 320.

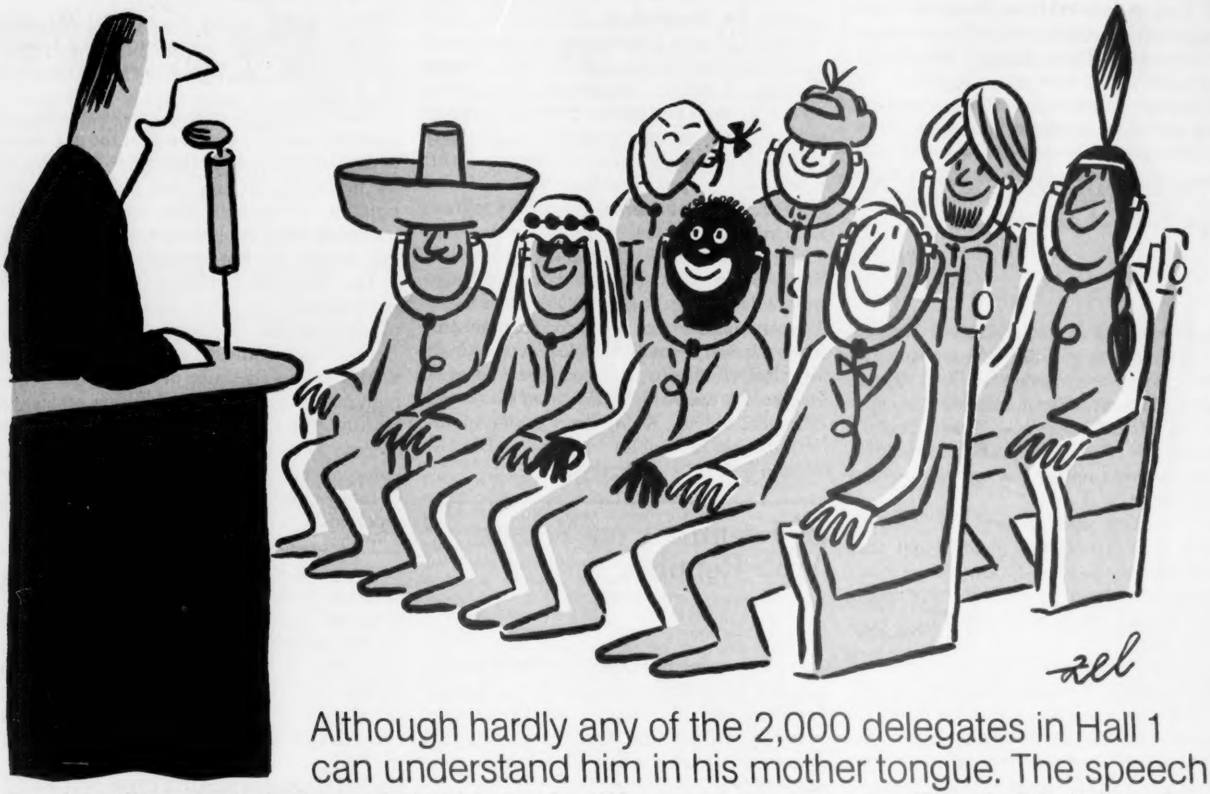
New trade techniques could save money: seminar

A conference to show managers how they can increase profits on overseas business by using new international trade techniques is being organised by the Simplification of International Trade Procedures Board (Sitpro) on 19 September at the Royal Lancaster Hotel, London.

The conference will be, says Sitpro, the first occasion for British management to obtain a full view of the cash savings and improved control that can be gained in one of the most neglected and expensive sectors of overseas trade practice.

Experts speaking from their own experience will provide examples of the savings achieved by improving cash flow by better payment

Piet Zeutemelk finds worldwide understanding – at the ICC Berlin.



Although hardly any of the 2,000 delegates in Hall 1 can understand him in his mother tongue. The speech is simultaneously translated into 8 different languages. Frank Dwight of Texas, for example, can hear it in American, and Pedro Gonzales in Spanish... The simultaneous translation system is just one of many distinctive features at the biggest, most versatile convention center there'll be in Europe as of April 1979: the ICC Berlin.

We thank Herr Zeutemelk for his remarks...

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procedures, rationalising and updating customs procedures, cutting documentation costs and applying computerisation to trade procedures.

The conference is aimed at export directors, marketing and finance directors, freight and shipping managers, freight forwarders, international carriers, company secretaries and all those responsible for the transportation of goods. Also present will be representatives from other bodies similar to Sitpro from the United States, Canada, Japan and several European countries.

Further details can be obtained from Oyez-IBC Ltd, Norwich House, Norwich Street, London EC4A 1AB, tel. 01-242 2481 or Sitpro, 11-12 Waterloo Place, London SW1Y 4AU, tel. 01-839 3393.

A feature on the work of Sitpro was published in *Trade and Industry*, 18 August.

Investment will help UK exports – Catherwood

More investment in manufacturing industry and a strengthening of the British economy's market sector are needed to help British exports. This was the major theme in a paper given by British Overseas Trade Board's chairman Sir Frederick Catherwood to a seminar on unemployment at Nottingham University on 31 August.

Sir Frederick also stressed the need to upgrade UK exports and pointed out that those British companies which could get a sufficient cash flow from exports to invest as much as their foreign competitors would have very low unit costs.

He praised particularly the export efforts of small companies in overseas markets. He said it might be necessary sometimes for the smaller business to take part in a joint venture if it did not have the funds to break into a market, either through BOTB's joint-venture scheme or through its market entry guarantee scheme.

The board's market entry guarantee scheme was a trial scheme to help smaller and medium sized firms in the manufacturing industry to deal with the financial risk and problems associated with a venture to develop a new export market. Through the board's joint-venture scheme, group participation for British firms in overseas trade fairs and exhibitions, store promotions, seminars and symposia, were arranged.

UK industry gains £13m from July aid

British industry received over £13 million in July from orders arising from aid grants and loans made to the developing countries by the Ministry of Overseas Development and administered by the Crown Agents.

The following were among the largest contracts for goods accepted for financing in July, including earlier contracts now accepted for reimbursement from aid funds: Bus and truck chassis for Bangladesh (£3,345,336) from Vauxhall Motors, Luton; pipes for rural water supply for The Gambia (£36,957) from Brown Lennox, London; tarpaulins for Ghana (£36,972) from C. Groom, London; concrete mixers and dumper trucks for Guyana (£167,480) from Wingets, Rochester, Kent; newsprint paper machinery for India (£5,492,329) from Beloit Walmsley, Bury, Lancashire; universal columns for building construction for India (£167,130) from British Steel, Middlesbrough; telephone exchange equipment for Lesotho (£90,996) from Plessey Telecommunications, Beeston, Nottingham; sea-truck workboats for Pakistan (£87,518) from Rotork Marine, Reigate, Surrey; double fly tents for Sudan (£29,858) from Black and Edington, Sidcup, Kent; diesel engine spares for Tanzania (£154,002) from Ruston Diesels, Newton-le-Willows, Merseyside.

CBI seminar on Yemen Arab Republic

On 25 September, the Confederation of British Industry is holding a seminar on the Yemen Arab Republic. The programme will include a review of the political climate, commercial opportunities and the five-year development plan.

The seminar will be chaired by Lord Limerick, chairman of the committee for Middle East trade, and the principal speaker will be Ben Strachan, British ambassador to the Yemen Arab Republic.

The seminar will be held at the CBI, 21 Tothill Street, London SW1 from 14.45 to approximately 17.30. There is no charge for admission. Reservations can be made by telephoning Christine Prentice on 01-930 6711 ext. 208.

Overseas trade exhibitions

British hi-fi sounds out at German audio fair

From F. J. Savage, British consulate-general, Düsseldorf

Orders wortth more than £250,000 were placed with British firms during the Düsseldorf fourth international hi-fi exhibition (18 to 24 August).

Most companies expect increased sales as a result of trade contacts made at the fair. Some of the British firms exhibiting in Germany for the first time said they were pleased with the number of inquiries from agents and distributors which could be a valuable lead into this competitive but valuable market.

The Düsseldorf exhibition, aimed at the particularly lucrative European market, covered the complete range of hi-fi equipment.

The British audio industry, under the sponsorship of the Federation of British Audio, was represented by 25 firms exhibiting under the British Overseas Trade Board's joint-venture scheme. A further six UK firms exhibited independently or in conjunction with their German subsidiaries. All the British firms reported keen interest in their products.

Twenty-one of the 25 UK firms in the joint venture indicated that they intend to be represented at the next international hi-fi exhibition in Düsseldorf, due to be held from 22 to 28 August 1980.

In 1977 1.6 million hi-fi units were sold in Europe with approximately a third coming from Japan. Europe accounted for 28 per cent of world sales last year, and with reports that the European and German markets have only reached saturation points of 19 per cent and 25 per cent respectively, all manufacturers are anxious to increase their share of an expanding market.

British manufacturers of high-quality loudspeakers were particularly pleased with the interest displayed in their equipment by the German public, now appreciably more knowledgeable than a few years ago, and firms exhibiting tuners, amplifiers, hi-fi accessories and specialist equipment received much attention from German and continental dealers.

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Overseas trade country data

Argentina

Payment terms for capital goods. Central Bank circular RC 760, 30 June, notifies importers and others interested about the payment of imports of capital goods from that date. Main points of the circular are:

Free negotiation of financing terms for all imports of capital goods with selling parties is permitted and full or partial payment against shipping documents and prior payment of up to 20 per cent of the fob value of the goods allowed.

These regulations may be applied to previous operations.

When these operations exceed US$5 milllion fob, the prior approval of the Argentine Central Bank is necessary.

An unofficial English translation of this circular is available from OTAR 01-248 5757 ext. 474/476.

Amendments to import tariff. The Argentine Ministry of Economy has passed several resolutions amending the import tariff. Inquiries quoting the tariff number or specifying the product to OTAR 01-248 5757 ext. 474/476.

Australia

Welded steel pipes and tubes. *Trade and Industry* on June 2 reported that the Industries Assistance Commission had been asked by the Australian government to inquire into and report by 15 June on the question as to whether welded steel pipe and tube with a wall thickness exceeding 2 mm, and internal diameter not exceeding 76 mm, imported from developing countries at the developing country preferential rate was causing or threatening injury to local industry.

It has now been announced that the government has accepted the commission's findings that concessional entry for welded pipes and tubes, other than of stainless steel, should be withdrawn in the case of imports from India and the Republic of Korea. The commission had found that imports of these goods at the concessional preferential rate of duty applying to developing countries was causing, or threatening to cause, injury to Australian industry.

Inquiries: CRE 01-215 5319.

Ref: CRE 900/78.

Dental alloy. The Australian government has received a request from local industry for temporary protection against imports of dental alloy falling within tariff item 30.05.000. Requests for temporary protection are initially considered by the department concerned and at a later date they may be referred to the Temporary Assistance Authority (TAA) for inquiry and report within 30 days of the date of reference. Any temporary protection that may be accorded goods of local manufacture on the recommendation of the TAA would be in the nature of a holding action pending government consideration of the long-term protection of the local industry.

Those wishing to make their views known on this application for temporary assistance should send their comments immediately to the Department of Industry and Commerce, Canberra, PO Box 80, ACT 2600.

Inquiries: CRE 01-215 5319.

Ref: CRE 1461/78.

Budget 1978: Additional levies. Following the Australian budget on 15 August, the Australian government has announced a special additional duty of 12.5 per cent on imports of certain finished goods which are subject to tariff quota or import licensing restrictions. The additional duty is applicable to base rates only and will apply from 16 August 1978; penalty rates remain unchanged.

Brandy 22.09.110, Pilches 39.07.131, Pilches 39.07.221, PVC film coats 39.07.411, PVC film coats 39.07.421, PVC/rubber-coated garments 39.07.431, PVC/rubber-coated garments 39.07.441, PVC/rubber-coated garments 38.07.451, PVC/rubber-coated garments 40.13.310, PVC/rubber-coated garments 40.13.410, Leather coats 42.03.310, Woven shirts and knitted undergarment shirts 60.04.110, Babies' napkins 60.04.310, Women's blouses/shirts 60.04.511, Women's blouses/shirts 60.04.591, Knitted coats, jumpers, cardigans 60.05.110, Women's blouses/shirts 60.05.110, Men's/boys' outerwear shirts 60.05.110, Female outergarments 60.05.110, Dressing gowns, kimonos 60.05.110, Swimwear 60.05.110, Men's shorts 60.05.110, Men's trousers 60.05.110, Dresses 60.05.110, Adult tracksuits 60.05.110, Boys' sets 60.05.110, Non-adult tracksuits 60.05.110, Men's suits 60.05.110, Suits under $5 60.05.110, Curtains 60.05.610, PVC/rubber-coated garments 61.01.111, PVC/rubber-coated garments 61.01.121, PVC/rubber-coated garments 61.01.191, Men's suits 61.01.210, Suits under $5 61.01.210, Men's coats 61.01.421, Men's coats 61.01.491, Men's shorts 61.01.611, Men's trousers 61.01.691, PVC/rubber-coated garments 61.01.691, Dressing gowns, kimonos 61.01.710, Swimwear 61.01.810, Boys' sets 61.01.911, Overalls (Trigger) 61.01.921, PVC/rubber-coated garments 61.01.921, PVC/rubber-coated garments 61.01.931, Woven shirts and knitted undergarment shirts 61.01.941, Dresses 61.02.111, Dresses 61.02.121, Dresses 61.02.131, Dresses 61.02.191, Women's woven coats 61.02.211, Women's woven coats 61.02.221, Women's woven coats 61.02.231, Women's woven coats 61.02.241, Women's woven coats 61.02.251, Women's woven coats 61.02.261, Women's blouses/shirts 61.02.311, Female outergarments 61.02.311, Female outergarments 61.02.321, Female outergarments 61.02.331, Female outergarments 61.02.341, PVC/rubber-coated garments 61.02.411, PVC/rubber-coated garments 61.02.421, PVC/rubber-coated garments 61.02.431, PVC/rubber-coated garments 61.02.441, PVC/rubber-coated garments 61.02.451, PVC/rubber-coated garments 61.02.491, Dressing gowns, kimonos 61.02.610, PVC/rubber-coated garments 61.02.721, Female outergarments 61.02.791, Swimwear 61.02.810, PVC/rubber-coated garments 61.02.921, PVC/rubber-coated garments 61.02.931, Female outergarments 61.02.991, Woven shirts and knitted undergarment shirts 61.03.110, Men's pyjamas 61.03.210, Babies' napkins 61.04.111, Babies' napkins 61.04.121, Women's sleepwear 61.04.210, Women's blouses/shirts 61.04.310, Brassieres 61.09.110, Bed linen 62.02.110, Terry towels 62.02.610, Curtains 62.02.710, Footwear, non-leather uppers 64.01.990, Thongs, non-leather uppers 64.01.990, Specialist sporting footwear 64.01.990, Gumboots, traditional type 64.01.990, Sand boots and shoes 64.02.910, Footwear, leather uppers 64.02.990, Thongs, leather uppers 64.02.990, Specialist sporting footwear 64.02.990, Footwear, non-leather uppers 64.03.900, Thongs 64.03.900, Footwear, non-leather uppers 64.04.900, Thongs 64.04.900, Files and rasps 82.03.300, Vices (industrial) 82.04.410, Razor blades 82.11.200, Chest freezers 84.15.220, Hand-operated chain hoists 84.22.231, Hand-operated chain hoists 84.22.241, Passenger motor vehicles 87.02.110, Passenger motor vehicles 87.02.210, Sleeping bags 94.04.210.

Inquiries: OTAR 01-248 5757 ext. 468/469/401.

Further information

In many cases further information on the notices published on these pages is available to British exporters from the Department of Trade. The main branches concerned are: Commercial Relations and Exports (CRE) Divisions, 1 Victoria Street, London SW1H 0ET (tel: direct dialling); and Overseas Tariffs and Regulations Section (OTAR), Export Data Branch, Export Services and Promotions Division, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757. In each case, the relevant information source is indicated at the end of the notice by its initials (OTAR or CRE) and, in the case of OTAR, the telephone extension.

Ghana

Airport closure. It is understood that Kotoka international airport, Accra, will be closed between 15 October and 15 November (dates subject to change) so that the main runway can be repaired.

Inquiries: CRE 01-215 3064.

Israel

Standards. The following Israeli standards have been declared official and compliance with them will be compulsory 60 days from the date indicated in parenthesis against each standard:

IS 457, September 1962
Electric water heaters without thermic insulation. (15 June 1978).
IS 322, April 1972
Electric washing machines for household use. (15 June 1978).
IS 473, January 1973
Insulated electric cables, cords and conductors for a nominal tension of up to 1000 volts: general requirements. (15 June 1978).
IS 396, April 1961
Fluorescent tube fittings: general requirements. (15 June 1978).
IS 793, April 1971
Electric toasters (18 June 1978).
IS 302, February 1961
Hand operated air brake switches and isolaters. (20 June 1978).
IS 582, July 1971
Ballasts for high power mercury vapour lamps. (22 June 1978).
IS 65, June 1971
Round copper conductors for insulated cables, cords and conductors. (29 June 1978).
IS 62, February 1975
Electric conductors. (20 July 1978).
IS 149, February 1978
Electric storage heaters for rooms. (20 July 1978).
IS 232, August 1965
Screwed electric fuse with cartridge: 100 and 200 Amp fuses for rear connection. (20 July 1978).
IS 233, December 1974
Fuses: 25 and 63 amperes. (20 July 1978).
IS 900, December 1974
Safety rules for electrical apparatus. (27 July 1978).
IS 907, July 1976
Gas stoves for home use, baking, cooking and roasting. (27 July 1978).
IS 910, November 1974
Hand-operated electric solderers. (27 July 1978).
IS 234, August 1965
Screwed electric fuse with cartridge: 100 and 200 Amp fuses for front connection. (30 July 1978).

The Standards Institute of Israel issues an English translation of the standards and copies may be obtained from the British Standards

Institution Library, 2 Park Street, London W1 (tel. 01-629 9000, telex 266933).

British exporters requiring technical advice are advised to contact Technical Help to Exporters, British Standards Institution, Maylands Avenue, Hemel Hempstead, Herts, HP2 4SQ (tel. 0442 3111, telex 82424).

Inquiries: OTAR 01-248 5757 ext. 458/461.

Intoxicating liquors. The Israeli authorities have issued the Commodities and Services Control (Sale of Intoxicating Liquors in Closed Bottles) Order 1978. The order basically deals with the way in which bottles containing intoxicating liquors may be corked.

Copies of the above order may be obtained from OTAR 01-248 5757 ext. 458/461.

Anti-dumping surcharge. To prevent dumping the Israeli authorities have levied a surcharge (payable by importers) on the following goods:

Tariff heading/Description	Unit	Rate of surcharge
ex 76.03 Wrought plates, sheets and strips of aluminium, excluding discs of aluminium.[1]	ton	Amount of difference between their fob price and 1.665 US dollars.
ex 76.03 Discs of aluminium [1]	Ton	Amount of difference between their fob price and 1.905 US dollars.
ex 83.05 Clips of a weight of up to 60 g per 100 units	—	The amount of difference between their fob. price and 0.11 US dollars
ex 83.05 Other clips of a weight of up to 170 g per 100 units	—	The amount of difference between their fob. price and 0.28 US dollars

[1] These goods may be exempt from the anti-dumping surcharge if the Director General of the Ministry of Industry, Commerce and Tourism certifies that the goods are not produced in Israel or are intended for production for the purpose of export.

Inquiries: OTAR 01-248 5757 ext. 458/461.

Kenya

The food, etc act. The Food, Drugs, and Chemical Substances (General) Regulations 1978 were published in the Republic of Kenya *Gazette* supplement, 1 July, and will come into force on a date to be determined by the Minister of Health for Kenya.

Inquiries: OTAR 01-248 5757 ext. 471/472/473.

Mexico

Tariff amendments. Acuerdos of the Mexican Secretaria de Comercio published in the *Diario Oficial*, 9 August, amended the official prices of some goods in the following tariff headings:

26.01, 28.28, 28.38, 29.04, 29.13, 29.35, 38.19, 39.01, 40.13, 48.09, 48.21, 49.08, 51.04, 53.05, 56.01, 58.01, 65.06, 82.03, 82.05, 84.10, 84.15, 84.45, 84.59, 85.08, 85.19, 85.25, 90.01, 90.03, 90.17, 97.04, 97.06, 98.07

Inquiries: OTAR 01-248 5757 ext. 476/478.

Portugal

Vehicles for school transport. Portuguese *Diario da Republica* 147, 29 June, published order 344/78, which states that vehicles used exclusively for school transport are exempted from certain normal requirements but are subject to other special requirements.

Copies of the order, in Portuguese only, may be obtained from OTAR 01-248 5757 ext. 460.

Packages for phytopharmaceutical products. Regulatory dispatch 144/78, published in the Portuguese *Diario da Republica* 144, 26 June, authorises that the 30 × 3g package for aluminium phosphide phytopharmaceutical products (type of formulation: solid product for obtaining fumigant) containing 56 per cent of active substance, may be replaced by other packages of the capacities specified in the table below:

Active substance	Type of formulation	Active substance content %	Capacity of package
Aluminium phosphide	Solid product for obtaining fumigant-tablets	56	3g × 30 tabs × 3 tubes = 270g 3g × 30 tabs × 16 tubes = 1440g
	Solid product for obtaining fumigant pellets	56	0.6 × 1600 pellets = 960g
	Solid product for obtaining fumigant-powder	56	34g × 10 sachets =340g 34g × 15 sachets =510g 34g × 20 satchets =680g

Similarly, a further type of package is established (capacity 460g) for methyl bromide phytopharmaceutical products in liquid form for obtaining fumigant, containing 980g/litre active substance.

Inquiries: OTAR 01-248 5757 ext. 460.

Import licences. Delays in the granting of import licences for Portugal, reported in *Trade and Industry*, 30 June, appear to persist. Despacho normativo 188/78, published in the *Diario da Republica*, first series, 189, 18 August, states that applications submitted during July and not issued by 30 August and those submitted from 1 August and not issued within a period of 60 days after their delivery to the Direccao de Servicos das Normas Reguladoras do Comercio Externo will not be processed, and the applicants will be required to submit new applications.

Inquiries: CRE 01-215 5341

Seychelles

National development plan. A copy of the national development plan 1978–82 has been received in Export Services Division. It is available for inspection at the Statistics and Market Intelligence Library, Room D16, Export House, 50 Ludgate Hill, London EC4 7HU, tel. 01-248 5757 ext. 368/369.

After a period of two weeks copies will be available for loan. Applications will be dealt with in strict order of receipt.

South Africa

Rebates and refunds of excise duty. The following amendment was published in the South African *Government Gazette*, 11 August.

R. 1629, Item 606.04.03. Provision is made for a rebate of the full duty on beer made from malt, manufactured in a customs and excise warehouse and entered for use in the manufacture in that warehouse of similar beer with a determined lower or higher relative density before fermentation.

Inquiries: OTAR 01-248 5757 ext. 471/472/473/462.

Paper and rucksacks. Customs tariff application list 28/78, published in the South African *Government Gazette*, 1 September, contains applications to the Board of Trade and Industries for increases in duty on:

Paper and paperboard, surface-coloured, embossed, with a basis mass exceeding 200 g/m² but not exceeding 450 g/m² and of a value for duty purposes per 1000 kg exceeding R 1876 but not exceeding R 3300 classifiable under tariff subheadings 48.07.93.25 and 48.07.99.

This application cancels and supersedes the application published in tariff application list no 20/78:

Rucksacks, classifiable under tariff subheading 42.02.90.

British trade organisations thought to be interested in these applications are being informed. Any British firm affected which wishes to make representations to the South African Board of Trade and Industries and belongs to a trade organisation should, therefore, first contact its own trade association. If any firm proposes to make independent representations to the South African authorities and requires further information concerning the application, it should address inquiries to CRE 01-215 5274.

United States

Bolts, nuts, etc. The United States International Trade Commission on 3 August, having considered the submission of interested persons concerning the 'Good Cause' question, instituted an investigation under section 201 of the Trade Act 1974 to determine whether bolts, nuts, and large screws of iron and steel are being imported into the United States in such increased quantities as to be a substantial cause of serious injury.

It is the intention of the commission to expedite its investigation in this matter and to submit its report to the President as soon as possible. Details of the hearing, pre-hearing conference and views of the commission can be obtained from CRE 2 tel. 01-215 3365.

Speciality steel. Imports in pounds weight from the EEC for the product under quota at 11 August 1978:

Plates of stainless steel (item 923.21)	1 169 996

Inquiries: CRE 01-215 3365.

CRE tel. Direct dialling

OTAR telephone 01-248 5757
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JAPAN

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Statistics

The economy: selected indicators

Series are seasonally adjusted except where shown otherwise

	Gross domestic product (average estimate)	Consumers' expenditure	Fixed capital expenditure			Changes in stocks				Balance of payments		
				of which			of which					
			Total	Manu-facturing industry	Distributive and service industries excl. shipping	Total	Manu-facturing industry	Whole-salers	Retailers	Current balance	Visible balance	Invisible balance
	at 1975 prices		at 1975 prices			at 1975 prices				at current prices		
Base of index Series in Stock level at end-1977	1975	£ million	£ million			£ million 34,469	20,353	4,540	3,181	£ million		
1971	94.5	59 340	20 208	3 923	3 888	235	. .	. .	. .	1 090	261	829
1972	96.7	62 762	20 239	3 398	4 055	73	. .	. .	. .	135	−722	857
1973	103.4	65 497	21 609	3 504	4 674	2 983	1 336	432	624	−999	−2 383	1 384
1974	101.4	64 070	21 164	3 822	4 605	1 462	1 288	361	−180	−3 591	−5 235	1 644
1975	100.0	63 192	20 817	3 522	3 841	−1 925	−1 221	−249	−100	−1 855	−3 236	1 381
1976	102.9	63 320	20 489	3 345	3 926	261	316	131	13	−1 137	−3 589	2 452
1977	104.8	62 732	19 738	3 573	4 325	1 051	442	266	29	289	−1 709	1 998
1976 2nd qtr.	. .	. .	. .	828	972	. .	−46	−10	−88	−313	−949	636
3rd qtr.	. .	. .	. .	849	1 005	. .	83	81	27	−416	−1 132	716
4th qtr.	. .	. .	. .	856	1 014	. .	255	17	23	−329	−958	629
1977 1st qtr.	. .	. .	. .	851	1 030	. .	267	82	162	−495	−973	478
2nd qtr.	. .	. .	. .	879	1 044	. .	79	179	−18	−297	−762	465
3rd qtr.	. .	. .	. .	910	1 103	. .	−18	−80	−76	574	31	543
4th qtr.	. .	. .	. .	932	1 149	. .	115	85	−39	507	−5	512
1978 1st qtr.	. .	. .	. .	920	1 169	. .	71	81	114	−317	−612	295
2nd qtr.	. .	. .	. .	979	1 172	. .	191 p	−15 p	102 p	198	−135	333
% change last 2 qtrs. on prev. 2 qtrs.	. .	. .	. .	+3.1	+4.0							
on a year earlier	. .	. .	. .	+9.8	+12.9							

	Industrial production		Personal expenditure		Prices and earnings					Labour (UK)			Visible trade (volume)	
	Total all indus-tries	Total manu-facturing industries	Retail sales	Cars: new regis-trations	Retail prices		Wholesale prices: all manufacturing industry		Average gross earnings of all employees (GB, all industries and services covered)	Unemployed excluding school leavers and adult students		Unfilled vacancies for adults	Export	Import
				monthly averages		% increase on a year earlier	basic materials and fuel used	manu-factured products: home sales		mid-month count	% of total em-ployees	mid-month count	On a balance of payment basis	
	at 1970 prices		at 1971 prices		(not seasonally adjusted)				(old series)				at 1975 prices	
Base of index £m in base year Series in	1970	1970	1971 16,296	thousands	Jan. 1974		1970	1970	Jan. 1970	thousands		thousands	1975 19,463	1975 22,699
1971	100.1	99.4	100.0	108.5	80.0	9.4	104.6	109.0	118.7	775.8	3.4	130.9	85.4	85.7
1972	102.3	102.0	105.3	138.6	85.7	7.1	109.2	114.8	134.0	854.9	3.7	147.3	85.2	95.3
1973	110.0	110.5	110.3	137.1	93.5	9.1	144.5	123.2	152.1	611.0	2.6	307.0	97.8	108.7
1974	106.3	108.9	109.0	102.8	108.5	16.0	215.3	152.0	179.1	599.7[1]	2.6[1]	302.7[1]	104.3	109.7
1975	100.6	102.2	106.7	97.2	134.8	24.2	235.4	188.7	226.6	929.0	3.9	150.0[1]	100.0	100.0
1976	101.4	103.2	106.5	104.7	157.1	16.5	299.0	219.6	261.9	1 269.8[1]	5.4[1]	120.4[1]	109.8	105.7
1977	102.7	104.0	103.6	107.1	182.0	15.8	340.1	261.7	288.5	1 378.1	5.8	155.6[1]	118.9	107.1
1977 1st qtr.	103.4	105.5	103.3	104	174.1	16.5	341.5	248.0	280.0	1 329.5	5.6	. .	115.8	109.4
2nd qtr.	102.1	103.2	102.5	103	181.9	17.4	347.7	259.2	285.3	1 340.6	5.6	157.7	118.0	109.6
3rd qtr.	103.0	104.0	104.3	112	184.7	16.5	340.5	267.7	288.3	1 414.6	5.9	151.9	124.4	106.6
4th qtr.	102.4	103.4	104.4	110	187.4	13.1	330.6	272.1	300.4	1 427.8	6.0	160.1	117.6	102.7
1978 1st qtr.	103.5	103.8	106.3	129	190.6	9.5	326.7	279.0	310.8	1 409.4	5.9	187.7	119.9	114.1
2nd qtr.	104.3 p	104.8 p	108.0		195.8	7.7	340.7	284.6		1 372.7	5.7	210.3	122.2	109.6
1977 Oct.	102.1	103.1	102.7	116	186.5	14.1	333.8	271.0	295.8	1 431.5	6.0	156.0	119.0	101.4
Nov.	102.0	102.7	103.1	108	187.4	13.0	329.9	272.0	300.5	1 429.6	6.0	159.4	115.1	98.5
Dec.	103.1	104.4	106.9	104	188.4	12.1	328.0	273.3	304.8	1 422.3	6.0	165.0	118.8	108.1
1978 Jan.	103.2	103.5	104.9	125	189.5	9.9	324.9	277.1	306.3	1 419.2	5.9	180.3	111.7	114.4
Feb.	103.7	103.7	106.8	120	190.6	9.5	324.2	279.2	311.2	1 409.0	5.9	187.0	127.2	111.1
Mar.	103.5	104.4	107.0	142	191.8	9.1	331.0	280.6	314.8	1 400.0	5.9	195.8	120.9	116.7
Apr.	105.4	105.8	106.7	132	194.6	7.9	337.4	282.7	325.7	1 387.1	5.8	203.7	125.7	103.7
May	103.3	103.6	108.4	124	195.7	7.7	341.5	284.7	327.2	1 366.4	5.7	209.9	119.2	113.8
June	104.2 p	105.0 p	108.6	133	197.2	7.4	343.1 p	286.3 p	333.8 p	1 364.7	5.7	217.4	121.6	111.3
July			111.4	108	198.1	7.8	340.2 p	288.7 p		1 371.4	5.7	211.0	127.0	115.8
Aug										1 392.1 p	5.8	209.3		
% change latest 3 months on prev. 3 months	+0.8	+0.9	+2.4	−7.4	+2.4		+3.2	+2.0	+5.8	−0.6		+4.6	−1½	+3
on a year earlier	+2.2	+1.6	+5.9	+15.5	+7.6		−1.3	+9.1	+15.3	−1.1		+36.6	+1½	+2

p Provisional pe 2nd Preliminary e Estimate . . Not available [1] Average of available months

Inquiries: 01-215 3453

Economic indicators of the industrial countries: quarterly analysis

The overall picture remains one of slow recovery in the world economy. Industrial production in the OECD countries as a whole was little changed between November 1977 and March of this year but there are signs of some improvement in the second quarter. For the year 1977 as a whole, world exports rose by about 13 per cent, representing a volume increase of only about 3.5 per cent. There was little change in the volume of exports by developing countries while the volume of their imports increased at about the same rate as that of the industrial countries. A high rate of unemployment still prevails in the OECD area as a whole with no real sign of an easing in the situation. The inflation rates of most OECD countries have shown some improvement since the beginning of the year with the notable exceptions of the United States and Canada, where rapidly rising food prices have made a significant impact. In the OECD area as a whole, the year on year increase in consumer prices in June of this year stood at 8.2 per cent compared with 9.6 per cent in June 1977.

The tables have been prepared for the convenience of users who do not have access to the sources themselves. International publications (as indicated) have been used, supplemented, where available, by later reports, denoted – (e). The form of presentation adopted – indicators by subject – is for convenience only, and it must not be assumed that the indicators in the same table for different countries are strictly comparable. An attempt has been made to indicate major differences of definition, but the coverage and methods of collection vary considerably; this is partly due to different administrative procedures in various countries. Fuller details may be obtained from the sources indicated, and from the national publications of the countries concerned. Exchange rates are those used in the basic data sources. The group of industrial countries is taken as comprising the members of the Organistion for Economic Co-operation and Development (OECD) ie: western Europe, north America, Japan, Australia and New Zealand. Consumer prices apart, New Zealand is excluded from OECD totals in that insufficient information is available.

This article is the quarterly variation of the monthly series, supplementing the usual tables with those showing: gross domestic production, earnings/wages, world and industrial countries trade, balance of payments, import and export volume and exports of manufactures.

United States

After adverse weather and a prolonged coal strike resulting in a disappointing start to the year, there were some signs of a strengthening in the US economy in the second quarter. In the first quarter gnp was virtually unchanged on the previous quarter but is reported to have increased by 1.8 per cent in the second quarter. Industrial production showed a similar picture increasing very little in the first quarter but by nearly 3 per cent in the second. Press reports indicate that the trade deficit for the first six months of the year stands at $16.37 billion, up from $11.49 billion in the same period last year. It is claimed that export shipments were disrupted by the coal strike and adverse weather and that the introduction of minimum steel prices in mid-February led to an upsurge in steel imports before that date. The inflation rate has accelerated since February with the June increase on a year earlier reaching 7.3 per cent. The rate of food price increases has been a significant factor. There was a tendency for unemployment to fall during the first half of this year. However, the July

Table 1 **Industrial production** (excluding construction) seasonally adjusted

Indices 1970 = 100

	Belgium	Luxembourg	France	F.R. of Germany	Ireland	Italy	Netherlands	United Kingdom r	EEC ¹	Canada	United States	Japan	OECD
Weights in total	1.3	0.1	7.1	12.5	0.2	4.5	1.5	6.3	33.5	3.5	43.2	11.6	
1971	103	98.7	106	101.8	104	99.9	106	99.8	102	105.6	102.0	102.7	103
1972	109	102.8	112	105.7	109	104.4	111	102.1	107	113.0	111.0	110.1	110
1973	116	115.1	120	112.9	120	114.5	119	110.5	115	123.5	120.4	127.4	120
1974	120	119.1	123	111.3	122	119.0	125	108.5	115	127.4	119.9	122.5	120
1975	109	93.0	114	105.0	114	108.5	119	103.1	108	121.3	109.3	109.6	110
1976	118	98.9	124	112.7	125	121.1	126	104.3	115	127.4	120.4	121.7	120
1977	117	99.4	126	116.1	135	120.9	127	106.1	118	131.7	127.2	126.7	124
1975 1st quarter	111	101.4	113	104	114	110.2	120	106.9	108	121.3	105.0	107.2	108
2nd	107	92.3	113	104	113	107.0	117	102.4	106	120.7	106.0	108.8	108
3rd	106	83.2	112	104	114	105.9	115	101.2	106	120.8	111.8	111.0	111
4th	110	94.2	117	108	116	110.8	123	102.1	110	122.3	114.4	111.5	114
1976 1st quarter	114	97.5	123	111	121	116.6	124	102.6	113	125.7	118.1	116.9	117
2nd	119	103.7	123	113	123	120.7	126	104.5	115	128.0	120.0	121.0	119
3rd	118	96.6	125	114	126	122.7	127	104.2	116	127.5	121.4	123.5	120
4th	119	97.7	125	115	128	127.9	129	106.0	118	128.4	122.0	124.9	122
1977 1st quarter	120	100.1	129	117	130	131.3	127	107.3	120	131.1	123.9	126.4	124
2nd	118	103.4	125	116	135	122.1	128	105.6	117	131.5	127.1	126.3	124
3rd	114	94.4	125	116	134	121.2	125	106.2	117	131.5	128.4	126.2	125
4th	117	98.8	124	117	140	118.6	127	105.3	117	132.6	129.2	127.9	125
1978 1st quarter	119	106.4	126	117	145	124.1	127	106.6	119	133.1	129.5	131.6	126
2nd			128 e					107.6			133.3	133.5 e	
1977 January	121	101.6	129	117		131.3 e	129	107.4	120	131.5	122.7	126.9 e	123
February	119	96.7	127	116		131.2 e	126	107.2	119	130.8	123.6	125.2 e	123
March	121	102.0	129	118		131.5 e	127	107.2	121	131.1	125.5	127.0 e	125
April	118	100.0	125	116		123.1	132	106.0	118	130.7	126.3	126.3	124
May	119	105.6	123	115		125.8	127	107.2	117	131.5	127.1	125.9	124
June	118	104.5	128	116		117.4	126	103.7	117	132.5	127.8	126.7	124
July	111	97.9	125	115		119.5	124	106.4	116	131.0	128.7	124.7	124
August	119	84.7	125	116		120.4	124	106.3	117	132.0	128.1	127.1	124
September	113	100.7	126	117		123.6	126	106.0	118	131.5	128.5	126.9	125
October	112	94.4	122	116		118.3	126	104.9	116	131.8	128.8	126.1	124
November	117	103.2	126	117		120.8	125	104.8	118	132.7	129.2	128.3	126
December	121	98.7	122	119		116.7	130	106.1	117	133.2	129.6	129.3	126
1978 January	121	109.0	126	120		121.9	127	106.2	119	131.6	128.8	130.6	126
February	120	108.1	125	116		125.8	127	106.9	118	133.9	129.1	130.7	126
March	117	102.2	128	115		124.6	126	106.7	118	133.7	130.7	133.4	127
April	122	106.0	131	117		121.6	129	108.9	120	133.4	132.7	133.5	129
May	117	108.2	127	115		123.2	123	106.4	118		133.4	134.0	128 e
June			126 e					107.5			133.9	133.1 e	
% change latest three months													
On previous three months	−1.7	0.2	1.3	−2.3	3.6	1.4	−1.6	0.9	0.6	0.9	2.9	1.5	1.6
On a year earlier	−0.6	2.9	2.1	−0.6	11.5	−2.9	−2.1	1.9	–	2.1	4.9	5.7	2.9

¹ Excluding Denmark. r Revised. e Estimate.

Source: United Kingdom, Department of Trade; all others 'OECD Main Economic Indicators'.

increase to a rate per cent of 6.2 following a surprisingly large fall in June was the largest monthly rise recorded since March 1975.

Canada

The performance of the Canadian economy was generally sluggish in 1977 but showed some improvement during the second half. This was followed by a disappointing beginning to 1978. Real gnp increased by 0.7 per cent in the first quarter of 1978 over the previous quarter while industrial production, which had picked up in the fourth quarter, showed only a small increase in the early months of 1978.

The volume of exports seasonally adjusted continued to rise in the first quarter of this year although at a slower rate than in the fourth quarter of 1977, while the import volume declined strongly reflecting weak domestic demand. *Statistics Canada* reports that on a seasonally adjusted basis the balance of payments deficit on current account was reduced to 637 million Canadian dollars in the first quarter of 1978 from 803 million in the previous quarter.

During the second half of 1977 the rise in employment quickened but insufficiently to absorb what continues to be one of the fastest growing labour forces in the OECD area. The unemployment rate seasonally adjusted remained at a new post-war high of 8.6 per cent from March to June of this year but came down to 8.4 per cent in July. The increase in

Table 2 Gross domestic production seasonally adjusted

Indices 1970 = 100

	Canada [1]	United States [1]	Japan r [1]	Italy r	France [2]	FR of Germany [1]	United Kingdom
1971	106	103	107	102	105	103	102
1972	113	109	117	105	111	107	104
1973	122	115	128	112	118	112	111
1974	126	113	127	117	120	113	109
1975	127	112	130	113	120	110	107
1976	134	119	138	119	127	116	110
1977	138	125	145	121	129	119	111
1974 1st quarter	127	114	125	118	122	114	105
2nd	127	114	126	119	122	114	110
3rd	126	113	127	117	123	113	112
4th	126	112	128	114	119	111	110
1975 1st quarter	126	109	128	113	117	109	109
2nd	127	110	129	112	119	109	107
3rd	129	114	131	112	118	110	106
4th	129	114	133	115	121	112	107
1976 1st quarter	133	117	136	117	125	115	109
2nd	135	118	138	119	127	116	109
3rd	134	119	138	119	127	116	110
4th	134	120	140	122	128	118	111
1977 1st quarter	136	122	143	124	130	119	111
2nd	136	124	145	121	128	119	111
3rd	138	125	146	120	129	119	111
4th	139	127	147	120	130	120	111
1978 1st	140 e	127	151	122	132 e	120	112
2nd		129 e					
% change latest quarter							
On previous quarter	0.7	1.8	2.4	2.0	1.8	0.1	0.8
On a year earlier	2.9	4.0	5.7	−1.2	1.5	1.3	1.4

[1] GNP at market prices. [2] Annual and quarterly figures are on a different basis. Figures are subject to further revision.
e Estimated figures. r Revised.
Source: OECD National Income Accounts; German FR, Bundesbank Reihe 4; UK, Central Statistical Office; France, Insee.

Table 3 Unemployment seasonally adjusted*

Numbers thousands

	Belgium [3]	Denmark [1] [7]	France [1] [9]	F.R. of Germany [1] [9]	Ireland [3]	Italy [4] [5] [8]	Netherlands [1]	United Kingdom [1] [2]	Canada [4]	United States [4]	Japan [4]
1971	71	*30*	*337*	185	42	*613*	62	776	552	4 993	639
1972	87	*30*	*380*	246	48	*696*	108	885	562	4 840	730
1973	92	*21*	*394*	274	44	*669*	110	611	520	4 305	670
1974	105	*50*	*498*	583	48	*560*	135	600 [6]	521	5 076	740
1975	177	*124*	*840*	1 074	75	*654*	195	929	697	7 830	1 000
1976	229	*126*	*933*	1 060	84	*732*	211	1 270	736	7 288	1 080
1977	264	164	*1 073*	1 030	82	1 545	204	1 378	862	6 856	1 100
1976 1st quarter	213	*118*	*929*	1 136	82	*681*	211	1 220	703	7 224	1 072
2nd	227	*115*	*928*	1 040	84	*693*	209	1 261	728	7 111	1 102
3rd	238	*120*	*925*	1 031	85	*776*	217	1 300	748	7 363	1 101
4th	238	*126*	*942*	1 014	84	*777*	206	1 313	770	7 443	1 038
1977 1st quarter	246	147	*997*	1 018	82	1 459	197	1 330	826	7 161	1 032
2nd	261	156	*1 069*	1 025	83	1 432	200	1 341	852	6 889	1 110
3rd	276	163	*1 149*	1 054	83	1 692	213	1 415	878	6 736	1 150
4th	276	171	1 073	1 023	80	1 598	205	1 428	900	6 554	1 126
1978 1st quarter	275	185	1 055	1 014	77	1 520	197	1 409	910	6 155	1 146
2nd	286	183	1 141	985		1 455	201	1 373	943	5 962	1 267
1977 April	254	153	*1 037*	1 016	82		194	1 334	868	6 869	1 030
May	262	157	*1 066*	1 019	83		200	1 324	840	6 894	1 127
June	267	160	*1 105*	1 041	83		205	1 364	848	6 904	1 172
July	272	161	*1 140*	1 059	83		208	1 399	866	6 719	1 189
August	282	163	*1 174*	1 059	84		217	1 410	881	6 821	1 143
September	275	165	*1 132*	1 043	82		213	1 435	887	6 668	1 118
October	272	167	1 097	1 034	81		209	1 432	887	6 688	1 055
November	283	171	1 068	1 027	81		206	1 430	903	6 663	1 150
December	272	176	1 054	1 009	79		200	1 422	911	6 310	1 172
1978 January	274	181	1 028	1 002	78		199	1 419	891	6 226	1 112
February	274	184	1 050	1 028	77		196	1 409	901	6 090	1 150
March	278	191	1 086	1 012	77		197	1 400	938	6 148	1 175
April	282	184	1 106	978	77		196	1 387	935	5 983	1 198
May	289	182	1 132	987			201	1 366	949	6 149	1 273
June	286	183	1 186	989			205	1 365	944	5 754	1 329
July	286 e		1 241	1 008 e				1 371	927		
August								1 392			
Rate % latest month	10.6 e	8.5	6.6	4.5 e	11.0	6.8	5.1	5.8	8.4	5.7	2.4 e
% change latest three months											
On previous three months	3.2	−1.3	9.8	−1.1	−3.0	−4.3	1.7	−0.6	1.7	−3.1	10.6
On a year earlier	7.5	16.8	n.a.	−4.3	−6.5	1.6	0.5	−1.1	10.4	−13.5	14.1

*Unemployment data are defined and collected on different bases in different countries. The following notes indicate main variations preventing direct international comparison. [1] Numbers registered at employment offices. Rates are calculated as percentages of total employees. [2] Excluding school leavers. [3] Insured unemployed. Rates are calculated as percentages of total insured population. [4] Labour force sample survey. Rates are calculated as percentages of total labour force. The quarterly data for Italy relate to January, April, July and October. [5] Estimated in the absence of one month's figures. [6] From 1977, new method of calculating unemployment which is not consistent with the previous figures. [7] From 1977, including unemployed insured for loss of part time jobs. [8] Not seasonally adjusted. [9] Data from October 1977 are affected by administrative changes which tend to reduce the figures. e Estimated. r Revised. n.a. Not available. Source: 'OECD Main Economic Indicators' and 'Department of Employment Gazette'.

STRATEGY NEWS

Trade and Industry monthly guide to developments in the Industrial Strategy

No 3 September 1978

PM opens £11m Triplex plant

Prime Minister James Callaghan has inaugurated a new £11 million plant for the manufacture of Triplex Ten Twenty laminated windscreens. Triplex Safety Glass Co Ltd had received £625,000 towards the cost of the project under the accelerated projects scheme.

Speaking at the opening ceremony in Birmingham on 31 August, the Prime Minister said this new Ten Twenty plant was yet another example that the best of British industry was second to none. 'Britain has a history of industrial inventiveness and skill,' said Mr Callaghan. 'This remarkable Triplex plant demonstrates that we have a bright industrial future too. The production of the world-beating Ten Twenty windscreen is foremost among a number of exciting projects that are reinforcing the position of the west Midlands, and Birmingham in particular, as an industrial powerhouse.'

Credit for the development of the Ten Twenty windscreen – the first really big advance in windscreen safety to have been introduced into volume output in the last 40 years – went to Triplex and Pilkington. Their success would mean 'extra jobs, more exports, extra profit'.

Mr Callaghan said he was glad the government had been able to play an important financial role in the launching of this project, enabling Triplex to embark on its investment ahead of foreign competitors and at a time when it would not otherwise have done so.

Mr Callaghan pointed out that the production of the Ten Twenty laminated glass alone was providing well over 200 extra jobs at Triplex, as well as securing the employment of those already working here. The project, he said, was a practical example of the way in which the Industrial Strategy was working to the advantage of Britain.

'This strategy is based on partnership and constructive co-operation between both sides of industry and government, to examine first what each main sector of industry needs to make it a leader in its field: then to translate those results into practical action by government, by management and by workers at plant level.'

Mr Callaghan indicated that the Industrial Strategy had already notched up sufficient success stories to demonstrate conclusively that it was no short-term gimmick. The increasingly fruitful team effort by management, workforce and government working together was sharpening the competitive edge of manufacturing industry, through modernisation of plant, introduction of new processes and greater flexibility in work practices. 'We have made a beginning,' he said.

Mr Callaghan emphasised that it was a major concern of the government during the present world recession to support the preservation and creation of efficient and productive jobs. 'That is central to the government's whole Industrial Strategy. It is a major task.'

He added that the government would continue to use funds to ease the process of change and the introduction of new products. 'Change will come,' he said, 'old processes will become obsolescent, new processes and products will take their place – as you are seeing at Triplex – and this will be the best long-term safeguard of jobs.'

The Prime Minister said he believed Britain was now at the beginning of a new industrial advance and this plant was a symbol of the hopeful change that was taking place.

Prime Minister James Callaghan checks a Ten Twenty windscreen.

What the Industrial Strategy means

For over 20 years Britain's manufacturing industries have been losing ground to foreign competitors. It has happened not only in overseas markets but at home too. As a result, many of Britain's competitors have become more prosperous, enjoying a higher standard of living.

Launched at Chequers in November 1975, the Industrial Strategy sets out to make the UK a high output/high wage economy with an internationally competitive manufacturing base built on a substantial improvement in manufacturing performance. It involves identifying the reasons for Britain's comparatively poor performance in manufacturing; and finding ways to remedy the problems.

The job is being tackled jointly by government, management and unions under the umbrella of the National Economic Development Council. And it is on a practical basis in that each of some 40 sectors of industry is being examined separately – by an economic development committee or working party of people directly involved in it.

Work of the SWPs

In February this year, the National Economic Development Council (Neddy) received progress reports submitted by some 40 of the sector working parties (SWPs) as the latest stage in the Industrial Strategy. As Neddy brings together leaders of government, unions and management to discuss the nation's economic and industrial problems and ways of overcoming these problems, so the SWPs for individual sectors of manufacturing industry, bring together representatives of government, unions and management to analyse their own industry in depth and to agree a programme which aims to improve each industry's competitiveness.

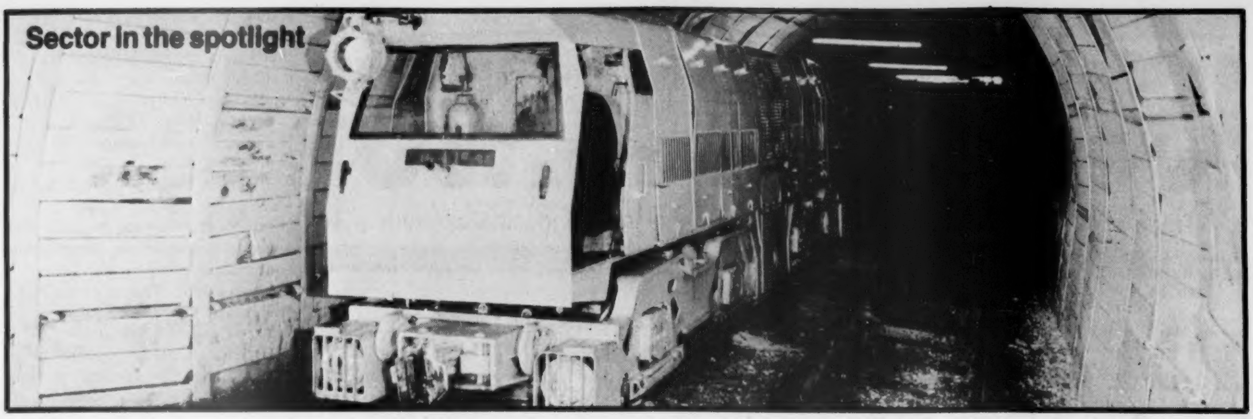
The task of each SWP is to study its particular industry in detail. The SWPs suggest ways of solving the problems facing their sectors and seizing the opportunities, both by action within the industry and with outside help from the government and others. The aim is to increase each industry's competitive performance so that it takes a larger share of home and overseas markets.

Industries involved

These are the industries directly involved:

Petrochemicals, pharmaceuticals, specialised organics, domestic electrical appliances, heavy electrical machinery, industrial electrical equipment, electronic components, electronic computers, electronic consumer goods, radio, radar and navigational aids, automation and instrumentation, telecommunications,
food and drink industries (biscuits, brewing, meat and meat products, milk and milk products, cocoa, chocolate and sugar confectionery, spirit distilling and compounding), ferrous foundries, non-ferrous foundries, footwear, iron and steel, machine tools, constructional steelwork, construction equipment, fluid-power equipment, food and drink machinery,
industrial engines, industrial trucks, mining machinery, office machinery, mechanical-handling equipment, printing machinery, heating, ventilating, air-conditioning and refrigeration equipment, textile machinery, paper and board, plastics processing, process plant, pumps and valves, rubber, clothing, knitting, man-made fibres, wool textiles.

Sector in the spotlight



Mining machinery

With a relatively stable home market and opportunities for expansion overseas, future prospects of the mining machinery sector appear to be improving. We look here at the sector's performance at home and its plans for expansion, as outlined in this year's mining machinery sector working party progress report.

Demand for coal mining machinery is inextricably linked with demand for coal. Up to the early 70s, cheap Middle East oil resulted in a declining demand for coal and the mining machinery sector found itself in the doldrums.

The increase in oil prices and the publication of the government's 'Plan for coal' (1974), however, signalled an upsurge of interest in the importance of coal as an indigenous energy source and improved prospects for the mining machinery sector.

Nevertheless, the SWP feels that a clear energy policy confirming the favourable prospects for coal in the period following the plan would allow the sector to be more confident about its future. The sector would also like to see plans for future levels of coal production taking account of new uses for coal and is pleased that the government's energy policy appears to be moving in this direction.

Stability at home

The sector's main home customer is NCB, which accounts for three-quarters of total sales. The two broad categories of products involved are surface and underground plant and machinery. Based on forecasts of coal production, the home market for mining machinery is expected to remain fairly stable for the next few years, though the demand for particular types of machinery may fluctuate. Import penetration of mining machinery is very low as the table below shows.

Mining machinery: imports . . .

	1975	1976
Imports (£m)	4.3	7.0
Percentage of home market	1.6	2.7

Source: *Business Monitor*

Against this background, the possibility of improving the sector's performance by selling more on the home market is limited, although the SWP is carefully monitoring trends in imports. The SWP has therefore decided that the only major prospects for expansion lie through overseas sales and has therefore concentrated its efforts in this direction.

The export target

An upturn of interest in coal worldwide has begun and is expected to continue, although much of the short-term benefit for machinery manufacturers will depend upon the speed at which world trade moves out of the present recession. The SWP's objective for the sector is the doubling of 1975 exports by 1981. The slower than expected growth of overseas markets has, however, resulted in the 1976 export figures being lower than those of 1975 (see below). Despite this early disappointment, the SWP is confident that it will be back on course by the end of the year.

. . . and exports

	1975	1976
Exports (£m)	41	36
As percentage of UK production	14	13

Source: *Business Monitor*

Achieving the objective

The export target is a major challenge for the sector and one that is requiring considerable efforts to attain. Competition is severe, but UK manufacturers are world leaders in longwall mining techniques and are well poised to obtain a share of this growing market. Opportunities are particularly good in south America, in the United States, where interest in longwall mining is growing, and notably in China, where it is understood that production will be doubled to about 1000 million tonnes by 1987.

Overcoming problems

The SWP has been considering in detail the problems facing the sector in securing a significant export increase. These include: the absence of any significant home market for some of the larger, heavier-duty types of machinery required abroad and, therefore, the lack of opportunity to display it to potential buyers in a working situation; differences in foreign standards and specifications and the need for arrangements in the UK to test to foreign requirements that are acceptable to overseas testing authorities; and the need for some means of securing export co-operation in the sector in bidding for total export package projects.

Considerable progress has been made by the SWP towards a solution of these issues. In particular, arrangements have been agreed between companies in the sector and the UK's main coal

Above: a 3-ft gauge 220 hp twin bogie diesel locomotive for hauling the man-riding train to coal workings. Below: Roadway cutter.

mining consultants, PD-NCB, to allow them to act as the front-runner for the sector in seeking out total export packages in developing countries. This would enable a single British presence to compete in developing countries' markets.

In addition, the SWP is seeking to arrange for testing stations in Britain to test machinery against foreign specifications and, ultimately, for their work to be acceptable to overseas testing authorities.

To help companies meet international competition, the SWP has also been concerned about improving the provision of finance for exports. Its talks with the Export Credits Guarantee Department have resulted in a better understanding of the ways in which ECGD could help, for example, in going some way towards enabling UK companies to compete with German offers of free trial installations in the United States market.

The SWP estimates that the sector is currently working at about 80 per cent of its productive capacity and achievement of its export target by 1981 is well within its capability. Over 24 000 people are now employed in the industry as the table below shows.

Mining equipment industry employment (thousands)

	1973	1974	1975	1976
Operatives	13.2	15.0	14.0	15.8
Others	7.3	8.1	7.4	8.2
Total	20.7	23.2	21.5	24.1

In the 1960s, the low level of sales of mining machinery had an ill-effect on the image of the industry and its ability to attract and retain skilled workers. The improvement in the sector's performance since then is reflected in the growth in employment. Some companies have reported shortages of skilled manpower and if the export target is reached, it is envisaged that there could be a 3 to 4 per cent increase in employment, representing perhaps 1400 additional jobs across the whole sector. The SWP has stressed that management and unions at company level will need to keep their manpower and training needs over the period to 1981 under review, in the light of their plans to meet the objectives set by the SWP.

To discuss means of achieving its export objectives and to acquaint individual workers with the activities of the SWP, conferences and visits to companies throughout the UK have been organised and are a continuing feature of the work of the SWP.

Power loading machine at the coal face.

Aid by sector

Section 8 of the Industry Act 1972 enables the government to provide selective financial assistance to industry where this will benefit the economy and serve the national interest. This article, by the Department of Industry's industrial development unit, explains how this assistance is helping to realise Industrial Strategy goals, and examines some of the sectoral schemes introduced during the last three years.

As well as providing the basis for important general schemes to encourage new industrial investment and development, such as the selective investment scheme (see *Strategy News*, 7 July) and the energy conservation scheme, section 8 assistance is being used to stimulate the competitive base of some key sectors of manufacturing industry. Detailed work by sector working parties has helped to identify the sectors in need of aid and led to the introduction of some of the more recent schemes.

The table (above) shows the 15 sectors in which schemes have been introduced since the beginning of 1975, with their allocations of funds.

Assistance usually takes the form of grants for projects involving investment in new product development, new equipment and buildings, and restructuring and rationalisation. Under most of the schemes smaller firms can get assistance towards consultancy studies.

All the schemes are operated selectively and tailored to help individual sectors realise Industrial Strategy goals. In assessing applications, the department must be satisfied that both projects and applicant companies have good prospects of viability.

Industry's response to the schemes has been good. Taking the schemes as a whole, offers totalling £160 million have so far been made for 1600 projects costing £770 million. A further 1000 applications for projects costing £500 million are under consideration and many more applications are expected under the schemes that are still open.

Although it is too early in many cases to attempt a firm assessment of the effectiveness of the individual schemes, there is no doubt that, from the evidence so far, they are helping to raise the level and quality of the investment in the sectors concerned.

Ferrous foundry industry

Assistance of £79 million has been offered to applicants under the ferrous foundry scheme in support of investment of £360 million on modernisation and development. This is expected to reverse the decline of the industry, lead to better working conditions, and improve the industry's ability to supply other industries.

Machine tool industry

Although the machine tool industry scheme got off to a slow start, it now looks as if it will be a marked success. All the £30 million allocated is likely to be taken up. The total value of the projects for which applications have been made exceeds £200 million, and it is apparent that the scheme is going to make a major contribution to the achievement of the Industrial Strategy objectives for the machine tool sector.

About one-third of total assistance claimed under the machine tool industry scheme is for the development of new products, which is encouraging for the future of the industry. The bulk of the remainder is being spent on the modernisation of plant in both small and large companies.

Sectoral assistance since 1975

Sector	£ million Amount allocated
[1] Clothing	15
Drop forging	5
[1] Electronic components	20
[1] Ferrous foundries	80
Footwear	4.5
Instrumentation and automation	10
[1] Machine tools	30
Microelectronics	16[2]
[1] Non-ferrous foundries	20
[1] Paper and board	23
[1] Poultrymeat processing	5
[1] Printing machinery	15
Redmeat slaughterhouses	20
[1] Textile machinery	20
[1] Wool textiles (stage 2)	5
	288.5

[1] Now closed to new applications. [2] An additional £54 million has been allocated to the microelectronics sector under the Science and Technology Act.

Non-ferrous foundry industry

All the £20 million allocated under the non-ferrous foundry industry scheme is likely to be taken up. Applications approved and under consideration reflect investment intentions of about £80 million, which should lead to extensive modernisation of the industry's plant and equipment, including automation. Improvement of working conditions will benefit employees, help the industry to retain workers and encourage recruitment, as well as to meet the castings requirements of customer industries.

Paper and board industry

The government introduced the paper and board industry scheme to encourage the industry to use more indigenous fibre, especially waste paper, and expects that the £23 million allocated will be spent. The scheme will help to increase the industry's annual recycling capacity by about 600 000 tonnes, a substantial increase on present waste consumption of just over 2 million tonnes, and yielding significant benefits to the balance of payments.

Electronic components industry

Over £13 million has so far been committed in support of total investment of £52 million. Further applications are being considered and it is expected that all the funds allocated will be taken up. The scheme is encouraging the industry to adapt to changes both in market and technology, which are necessary to rectify the adverse trade balance in this sector (see *Strategy News*, 11 August).

Information from IDU

Information about the sectoral industry schemes may be obtained from the Department of Industry's Industrial Development Unit, Room 842, Millbank Tower, London SW1P 4QU, tel. 01-211 3931.

Keeping up standards

Work already undertaken by the sector working parties points to the need for UK industry to improve the quality and technical performance of its products to meet the overseas challenge. Among the Department of Industry's research establishments, the National Physical Laboratory (NPL) at Teddington works to help industry strengthen its competitive base, providing calibration and advisory services and collaborative research and innovation with industrial partners.

There are few branches of manufacturing industry that are not critically dependent upon measurements of one sort or another – for process control, quality control, safety, efficiency, or to meet regulatory requirements. It is the primary task of NPL to provide the standards that form the basis of the UK's measurement system, to ensure that measurements of authenticated accuracy are available to users in industry and elsewhere.

To operate the national measurement system, NPL disseminates its standards in several ways. It provides a calibration service for devices such as pressure gauges, resistance thermometers, digital voltmeters and gauge blocks. Calibrations are available directly from the laboratory, where high accuracy or specialised measurements are concerned (some 5000 each year), and also through the growing number of laboratories approved by NPL's British calibration service. NPL also supplies reference materials, ranging from ceramic tiles of certified colour to pesticides of certified purity, and provides advisory services on most aspects of measurement.

Although the task of maintaining primary standards for the many fields of measurement essential to industry is a continuous one, it is certainly not static. Developments in industrial processes present a continuing challenge to NPL scientists who work to ensure that standards of the necessary range and accuracy are maintained to keep industries competitive.

Not so many years ago, for example, the measurement of high vacuum was a somewhat esoteric activity, pursued largely in research laboratories. Now, high vacua are used routinely in dozens of industrial applications like microcircuit production, optical coating and electron-beam welding; accurate measurement of the vacuum pressures in the process chambers are a vital component of quality control. NPL is in the forefront of vacuum metrology and, in collaboration with British gauge manufacturers, ensures that confidence may be placed in the accuracy of measurements.

Stability of high vacuum gauges being checked at NPL.

Another example is in the field of electrical power measurement where the enormous currents and high voltages involved in modern generators present severe measurement problems. However, NPL has developed calibration techniques which allow, for example, the 660 MW output of the recently commissioned Drax A station generators to be measured with an uncertainty of only 0.5 per cent. These measurements are essential not only for charging purposes but also to allow the generating process to be controlled to ensure optimum use of fuel.

NPL is also making preparations for the calibration of the meters to be used in the proposed cross-channel electricity links, where uncertainties in power measurements of only 0.01 per cent are necessary to ensure that international charges are calculated with an economic accuracy.

Accurate measurement has also proved essential in technological projects involving international collaboration. During manufacture of Concorde, it was no accident that the British nose and tail fuselage sections mated precisely with the French-made centre sections. Careful dimensional metrology, traceable to NPL standards, allowed the fine engineering tolerances to be met.

NPL ensures that its own standards are in full accord with those of France and other major industrial nations by deriving all measurements from the internationally defined SI base units. A continuing programme of international comparisons makes sure that the measurements stay in line.

Support for industry

The laboratory's support to UK manufacturing industry is not, of course, restricted to standards and measurement services. For example, research is carried out into the physical, chemical and engineering properties of the newer materials, such as glass ceramics, hard metals, polymers and composites, to provide design data and so encourage their greater use. Successful applications of this research range from the manufacture of loudspeakers, using special polymer for the cone material, to the development of glass-reinforced plastic (GRP) pipelines, both by UK companies.

The laboratory also researches into the mechanism and prevention of corrosion and, on behalf of DoI, operates the national corrosion service (an advisory service handling nearly 1000 applications per annum). Research results have been applied to such diverse situations as domestic hot-water cylinders and boilers in nuclear generating plant. A current collaborative project is concerned with the corrosion problems of 'hot-riser' pipes in offshore oil rigs.

A final example of NPL's work for industry lies in the important area of microprocessor applications. From its research into human-computer interaction, the laboratory has developed a number of devices in various stages of commercial exploitation.

One such is Mickie, a computer-based medical interviewing system designed to save doctors' time in eliciting preliminary information from patients. Another is the microprocessor-based design Mavis, a flexible system able to interlink a range of sensors and manipulative devices into a variety of aids to the handicapped.

Diary of events

Ministers are making a determined effort to meet successful British companies to discuss the Industrial Strategy and also to attend a number of other functions that relate to the Industrial Strategy. Details of these and of TUC and working party events are given below.

Date	Event
11 Sept	Bob Cryer: press conference to announce report on wool textile industry scheme
15	Leslie Huckfield: Industrial Strategy seminar for the Welsh TUC
16	Eric Varley: Aveling Marshall, Gainsborough
18	Bob Cryer: international clothing exhibition
19	Peter Archer: visit to Danks of Netherton Ltd, Oldbury and BSR, Cradley Heath
21	Eric Varley: TUC Industrial Strategy conference for clothing, textiles and footwear
27	Eric Varley: opening new factory for Petbow Ltd Leslie Huckfield: Wedgwood Ltd, Stoke-on-Trent
2 Oct	Alan Williams: opening British international footwear fair, Olympia
9	Leslie Huckfield: speech at the Institute of production engineering, branch annual dinner, Sheffield
12/13	Specialised organic chemicals, sector working party, workshop, Sheffield
25	Heating ventilation, air conditioning and refrigeration sector working party, conference, London

More about NPL

If you wish to know more about NPL, contact Dr P. B. Clapham, Head of External and Information Services Unit, NPL, Teddington, Middlesex TW11 0LW, tel. 01-977 3222, ext. 3040.

Table 4 **Earnings/wages per head in manufacturing**

Indices 1970 = 100

	Belgium [1]	Denmark [2,3]	France [8]	FR of Germany [1]	Ireland [2]	Italy [1]	Netherlands [1]	Great Britain [4]	Canada [7,8]	United States [5]	Japan [6,8]
1971	111	115	110	113	116	112	112	111	109	106	114
1972	126	129	121	123	133	124	126	126	118	113	132
1973	147	153	136	135	159	156	143	142	128	121	163
1974	178	186	159	151	191	191	169	166	145	131	205
1975	210	222	184	165	246	241	192	209	168	143	229
1976	235	248	211	174	287	292	208	244	191	154	258
1977	256	272	236	187		374	223	269	212	168	282
1974 1st quarter	162	172	147	146	172	176	159	147	136	126	178
2nd	173	184	155	151	188	184	167	159	141	129	203
3rd	184	189	164	154	196	194	173	172	149	133	211
4th	192	201	169	155	207	204	174	185	155	137	216
1975 1st quarter	201	209	175	162	222	228	184	194	161	140	222
2nd	207	221	180	164	241	240	188	202	166	141	219
3rd	213	224	189	166	255	247	196	215	170	144	234
4th	221	233	192	167	265	251	197	226	176	147	237
1976 1st quarter	227	237	198	170	272	258	206	233	183	150	248
2nd	232	246	207	174	280	280	206	242	189	152	251
3rd	238	250	215	176	289	310	209	247	194	156	259
4th	244	258	222	176	309	322	212	255	198	159	267
1977 1st quarter	250	259	227	184	313	344	217	260	205	162	274
2nd	254	272	232	187	328	367	220	266	210	165	280
3rd	258	276	240	189	337	386	227	268	215	169	283
4th	262	285	246	190		398	227	282	218	173	289
1978 1st quarter	265	292	251	191		412	232	291	222	177	297
2nd			258							179	
% change latest quarter											
On previous quarter	1.1	2.5	2.8	0.5	2.7	3.5	2.2	3.2	1.8	1.1	2.8
On a year earlier	6.0	12.7	11.2	3.8	16.6	19.8	6.9	11.9	8.3	8.5	8.4

[1] Hourly rates. [2] Hourly earnings. [3] Including mining. [4] Weekly earnings (all employees). [5] Gross hourly earnings per production worker. [6] Monthly earnings: regular workers. [7] Hourly earnings for firms employing 20 persons and over. [8] Seasonally adjusted. [9] Hourly rates manufacturing adjusted for change in hours worked.

Sources: All countries 'OECD Main Economic Indicators', except Great Britain (MEI and 'Department of Employment Gazette').

Table 5 **Consumer prices** All goods and services

Indices 1970 = 100

	Belgium	Luxembourg	Denmark	France	F.R. of Germany	Ireland	Italy	Netherlands [1]	United Kingdom	EEC [1]	Canada	United States	Japan	OECD [1]
1971	104.3	104.7	105.8	105.3	105.3	108.9	104.8	107.5	109.4	106.2	102.9	104.3	106.1	105.3
1972	110.0	110.1	112.8	111.7	111.1	118.4	110.8	115.9	117.2	112.7	107.8	107.7	110.9	110.2
1973	117.7	116.8	123.3	119.9	118.8	131.8	122.8	125.2	128.0	122.1	116.0	114.4	123.9	119.1
1974	132.6	128.0	142.1	136.3	127.1	154.2	146.3	137.3	148.4	138.0	128.6	127.0	154.2	134.3
1975	149.5	141.7	155.8	152.2	134.7	186.4	171.1	151.3	184.4	157.2	142.5	138.6	172.4	149.5
1976	163.2	155.6	169.8	166.8	140.8	219.9	199.8	164.6	214.9	175.0	153.2	146.6	188.4	162.5
1977	174.8	166.0	188.7	183.2	146.3	249.9	236.6	175.2	249.0	194.8	165.4	156.1	203.6	177.5
1976 1st quarter	158.7	151.1	162.0	161.1	139.0	206.3	185.0	159.0	204.4	167.9	149.8	143.7	181.4	157.5
2nd	161.9	154.5	168.5	164.8	141.1	219.1	196.7	164.3	211.9	173.4	152.1	145.5	187.7	161.1
3rd	164.9	157.0	171.1	168.6	141.2	222.4	202.2	165.4	216.8	176.4	154.3	147.8	189.8	163.8
4th	167.6	159.7	177.7	172.9	141.9	231.8	215.1	169.6	226.8	182.3	156.6	149.4	194.5	167.5
1977 1st quarter	170.9	163.4	179.6	175.6	144.6	240.7	225.2	170.9	238.2	188.0	159.9	152.1	198.8	171.6
2nd	173.7	165.9	185.4	181.0	146.5	249.7	233.8	175.2	248.8	193.9	163.7	155.3	204.2	176.4
3rd	176.3	167.0	190.0	185.3	146.9	252.4	239.7	176.3	252.7	197.0	167.3	157.6	204.8	179.5
4th	178.3	167.7	199.8	188.8	147.2	256.8	247.7	178.2	256.4	200.4	170.9	159.3	206.5	182.5
1978 1st quarter	180.6	168.9	202.6	191.8	149.1	260.5	254.2	178.7	260.8	203.8	174.0	162.0	207.4	185.6
2nd	181.4	170.7	205.6	197.3	150.5	265.1	262.3 e	181.4	267.9	208.0	178.3	166.2	211.6	190.3
1977 January	170.1	162.4	178.7	174.3	143.8		221.4	169.8 e	235.9	186.2	158.4	150.7	197.7	170.1
February	171.4	163.5	178.8	175.5	144.7	240.7	225.7	171.1 e	238.2	188.1	159.9	152.3	198.8	171.7
March	171.3	164.2	181.4	177.1	145.2		228.5	171.8	240.5	189.6	161.5	153.2	200.0	173.1
April	172.2	165.2	183.3	179.4	145.9		231.3	174.9	246.7	192.4	162.4	154.4	203.3	175.2
May	173.9	165.8	186.0	181.1	146.5	249.7	234.2	175.3	248.6	193.9	163.8	155.3	205.2	176.4
June	175.0	166.7	186.9	182.5	147.2		235.8	175.5	251.2	195.3	164.9	156.3	204.1	177.5
July	175.5	167.4	188.2	184.1	147.0		237.2	175.5	251.4	196.0	166.5	157.0	203.6	178.4
August	176.1	167.0	189.9	185.1	146.9	252.4	239.4	176.2	252.7	196.9	167.2	157.6	203.6	179.3
September	177.3	166.6	191.9	186.7	146.7		242.5	177.3	254.0	198.1	168.1	158.2	207.2	180.7
October	177.7	167.3	198.6	188.2	146.9		245.7	178.0	255.1	199.5	169.8	158.6	208.3	181.8
November	178.3	168.1	200.3	188.9	147.1	256.8	248.1	178.3	256.4	200.5	170.9	159.4	205.8	182.5
December	179.0	167.8	200.6	189.4	147.5		249.3	178.3	257.7	201.2	172.0	160.0	205.3	183.1
1978 January	179.9	168.5	201.8	190.3	148.4		251.4	177.7	259.2	202.4	172.6	160.9	206.2	184.2
February	180.7	168.9	202.6	191.7	149.2	260.5	254.0	178.5	260.7	203.8	173.8	162.0	207.1	185.5
March	181.1	169.4	203.5	193.4	149.7		257.2	180.0	262.4	205.2	175.7	163.1	208.9	187.0
April	181.3	170.4	204.3	195.5	150.1		259.7	181.2	266.2	206.8	176.1	164.6	211.2	188.7
May	181.5	170.6	206.1	197.4	150.5	265.1	262.6 e	181.5	267.7	207.4	178.6	166.2	212.4	190.2
June	181.5	171.1	206.5	198.9	150.8		264.6 e	181.4	269.8	209.8	180.1	167.7	211.2	192.1
Percentage change														
Latest month on same month a year earlier	3.7	2.7	10.5	9.0	2.4	6.2	12.2	3.4	7.4	7.4	9.2	7.3	3.5	8.2
Latest three months on previous three months	0.5	1.1	1.5	2.9	0.9	1.8	3.2	1.5	2.7	2.1	2.4	2.6	2.0	2.6
Latest three months on a year earlier	4.5	2.9	10.9	9.0	2.7	6.2	12.2	3.5	7.7	7.3	8.9	7.0	3.6	7.9

[1] Netherlands—from 1976, new index linked on 1975 to previous series. OECD and EEC indices have been adjusted accordingly.

Source: 'OECD Main Economic Indicators'. e Estimated.

consumer prices on a year earlier after easing in the first few months of this year accelerated to 9 per cent in May mainly due to soaring food prices.

Japan

The Japanese economy became more active in the first quarter of 1978. The growth of gnp having slowed down in the second half of 1977 increased sharply in the first quarter of this year boosted by higher real consumer expenditure and exports. Industrial production also expanded strongly in the first quarter and provisional figures for the second quarter suggest continued growth but at a slower rate. The rapid expansion of seasonally adjusted export volumes in the first quarter was partly due to special factors. Deliveries were accelerated in anticipation of higher freight rates for northern Pacific shipping routes and a longshore-men's strike on the west American coast in July. Import volumes also increased but less rapidly. The current account surplus for the first half of 1978 was a record 8.8 billion dollars compared with 3.08 billion dollars a year earlier despite the strong position of the yen. Unemployment has been moving upwards since the beginning of the year. With wholesale prices and downward trend largely reflecting the appreciation of the yen, the year on year increase in consumer prices has slowed in the first half of this year to reach 3½ per cent in June.

Federal Republic of Germany

After the improvement shown in German output and demand at the turn of the year signs of renewed weakness appeared. In the first half of 1978 industrial production was virtually

Table 6 World trade

Because of problems with the data table 6 does not appear; it will be reinstated as soon as possible. Meanwhile users requiring information are asked to telephone 01-215 3126 or write to the address shown at the end of the text.

Table 7 **Industrial countries' trade**

Quarters or quarterly averages, seasonally adjusted

US $ thousand million

	Exports (fob) to			Imports (cif)[3] from		
	World [4]	OECD [4]	Rest of world [2,4]	World [4]	OECD [4]	Rest of world [2,4]
1970	55.01	41.03	13.98	56.41	42.50	13.91
1971	61.51	45.89	15.62	62.68	47.29	15.39
1972	72.70	55.02	17.68	74.50	56.43	18.07
1973	99.72	74.57	25.15	102.71	76.24	26.47
1974	133.23	95.16	38.07	145.77	97.74	48.03
1975	141.81	96.07	45.74	146.60	99.75	46.85
1976	157.00	109.86	47.14	168.23	112.62	55.61
1977	179.17	124.53	54.64	191.91	127.37	64.54
1975 1st quarter	*146.07*	*99.70*	*46.37*	*150.34*	*104.03*	*46.31*
2nd	*140.31*	*94.30*	*46.01*	*143.44*	*98.62*	*44.82*
3rd	*136.89*	*91.90*	*44.99*	*142.26*	*95.81*	*46.45*
4th	*143.98*	*98.37*	*45.61*	*150.36*	*100.55*	*49.81*
1976 1st quarter	147.31	101.87	45.44	154.94	104.49	50.45
2nd	153.13	107.12	46.01	162.04	108.95	53.09
3rd	160.67	112.91	47.76	173.05	114.91	58.14
4th	166.88	117.54	49.34	182.87	122.13	60.74
1977 1st quarter	171.56	120.38	51.18	186.29	122.60	63.69
2nd	175.75	122.51	53.24	190.47	125.88	64.59
3rd	180.47	125.40	55.07	192.68	128.00	64.68
4th	188.89	129.83	59.06	198.21	133.01	65.20
% change latest three months						
On previous three months	4.7	3.5	7.2	2.9	3.9	0.8
On a year earlier	13.2	10.5	19.7	8.4	8.9	7.3

[2] Includes goods for which no destination is given. [3] Imports into Canada and the United States are valued fob.

[4] The OECD has revised the seasonally adjusted figures. It has been possible to include only the published versions at this stage. For this reason there is a discontinuity in figures prior to 1976 indicated in italics.

Source: 'OECD Series "A" '.

Table 8 **Exports** (fob) Special trade [1], seasonally adjusted

US $ million

	Belgium/ Luxembourg	Denmark [2]	France	F.R. of Germany	Ireland [2]	Italy	Netherlands	United Kingdom [2]	EEC	Canada [3]	United States [2]	Japan [2,3]	OECD [3]
1970	11 592	3 288	17 940	34 188	1 032	13 188	11 772	19 382	112 356	16 134	43 224	19 320	220 045
1971	12 081	3 609	20 592	39 009	1 308	15 177	13 953	22 365	128 084	17 676	44 211	23 994	246 037
1972	15 995	4 330	25 739	46 208	1 610	18 535	15 392	24 415	153 152	20 184	49 676	28 591	290 784
1973	22 416	6 120	35 952	67 440	2 124	22 236	23 952	30 632	210 684	25 200	71 316	36 936	398 880
1974	28 260	7 716	45 900	89 160	2 628	30 288	32 436	38 827	275 100	32 784	98 508	55 536	532 932
1975	28 812	8 712	52 212	90 024	3 216	34 824	34 440	44 270	295 992	32 304	107 652	55 752	567 804
1976	32 844	9 108	55 812	102 036	3 312	36 924	38 748	46 542	325 044	38 628	114 996	67 224	630 492
1977	37 488	10 068	63 516	117 936	4 392	45 036	43 680	57 526	379 620	41 556	120 168	80 496	715 104
1976 1st quarter	7 404	2 120	13 272	23 280	740	8 475	8 907	11 474	75 618	9 099	27 219	15 564	147 309
2nd	7 746	2 225	13 851	24 609	818	8 862	8 883	11 452	78 165	9 543	28 660	16 467	153 129
3rd	8 217	2 340	14 007	26 148	837	9 414	9 909	11 523	82 507	9 822	29 384	17 037	160 668
4th	9 144	2 445	14 586	27 456	886	9 972	11 001	12 093	87 727	9 576	29 450	17 787	166 884
1977 1st quarter	9 069	2 532	15 108	27 897	962	10 467	10 623	12 977	89 492	10 359	29 786	19 479	171 558
2nd	9 123	2 357	15 252	28 788	1 014	11 481	10 536	14 292	92 571	10 179	30 574	19 710	175 752
3rd	9 261	2 526	16 242	29 541	1 200	10 971	11 220	14 950	96 152	10 374	30 609	20 181	180 465
4th	9 849	2 709	17 465	32 048	1 226	12 064	11 635	15 307	102 812	10 477	29 485	21 237	188 887
1978 1st quarter[6]	10 252	2 676	17 325	32 394	1 364	11 520	11 978	17 062	103 793	10 756		23 898	
2nd								16 667					
1976 October	3 103	789	4 806	8 998	302	3 302	3 442	3 916	28 691	3 197	9 782	5 930	(54 511)
November	2 910	817	4 816	8 990	289	3 440	3 699	3 940	29 001	3 122	9 235	5 804	(54 497)
December	3 131	839	4 965	9 468	294	3 230	3 861	4 238	30 034	3 257	10 433	6 053	(57 372)
1977 January	3 005	836	5 085	9 202	309	3 450	3 577	4 347	29 770	3 300	9 807	6 566	(56 679)
February	2 934	824	4 992	9 147	322	3 409	3 620	4 293	29 504	3 349	9 904	6 428	(56 459)
March	3 130	872	5 031	9 548	331	3 608	3 427	4 336	30 218	3 710	10 075	6 486	(58 154)
April	3 023	838	4 977	9 276	330	3 825	3 584	4 698	30 426	3 447	10 102	6 758	(58 149)
May	2 990	723	5 173	9 603	331	3 804	3 489	4 642	30 646	3 321	10 398	6 400	(58 385)
June	3 109	796	5 101	9 909	352	3 853	3 465	4 951	31 499	3 411	10 074	6 552	(59 582)
July	2 978	818	5 162	9 482	397	3 549	3 666	5 021	31 097	(3 522)	10 246	(6 910)	(59 282)
August	2 989	846	5 411	9 861	397	3 850	3 844	4 823	32 170	(3 432)	9 479	(6 661)	(59 806)
September	3 293	861	5 670	10 199	405	3 571	3 709	5 106	32 885	(3 336)	10 884	(6 565)	(61 438)
October	3 083	835	5 765	10 369	345	3 548	3 670	5 017	32 724	3 453	9 174	6 773	59 840
November	3 173	890	5 488	10 197	418	3 999	3 776	4 898	33 268	3 074	9 093	7 145	60 620
December	3 593	984	6 212	11 482	463	4 517	4 189	5 392	36 820	3 950	11 218	7 319	68 427
1978 January [5]	3 641	885	5 650	10 942	493	3 717	4 044	5 363	34 455	3 252		7 784	
February	3 228	947	5 724	10 772	417	3 962	4 083	6 031	34 822	3 939		8 154	
March	3 383	844	5 951	10 680	454	3 841	3 851	5 668	34 516	3 565		7 960	
April	3 683	998	6 467	12 108	467	4 928	4 084	5 651	43 586	4 381		7 903	
May		891	5 820		413			5 469					
June								5 547					
July								6 022					

[1] See notes to table 9.

Source: United Kingdom. Department of Trade; all others: 'OECD Series "A" '.

unchanged from the second half of 1977 and there was little growth in gnp in the first quarter compared with the previous quarter. Both export and import volumes (seasonally adjusted) fell in the first quarter. However, press reports indicate that the merchandise trade surplus at 18.8 billion DM in the first half of 1978 was above the 18.4 billion DM a year earlier despite a 13 per cent appreciation of the mark against the dollar between January 1977 and June 1978. The year on year inflation rate fell steadily during the first six months of this year assisted by falling import prices and despite increases in VAT rates in January. In July it increased slightly to stand at 2.6 per cent, the lowest rate of the major industrial countries. Unemployment in Germany has been increasing since April of this year.

France

The recovery in activity, which began in the second half of 1977, continued in the first quarter of 1978. Gdp is estimated to have grown by 1.8 per cent and industrial production by 2½ per cent in the first quarter of this year compared with the fourth quarter of 1977. (The latest information suggests that industrial production may be on a rising trend although the index fell back in May). The French trade position has also improved. In the first five months of this year the value of exports expanded more strongly than imports compared with the same period in 1977. The trade ministry reports a trade surplus of 708 million francs in the first half of 1978, compared with a deficit of over 9 billion francs in the first half of 1977. In the first half of 1978 consumer prices have been running at about 9 per cent higher than a year earlier. With the phasing out of

Table 9 **Imports (cif)** Special trade [1], seasonally adjusted

US $ million

	Belgium/ Luxembourg	Denmark [2]	France	F.R. of Germany	Ireland [2]	Italy	Nether-lands	United Kingdom [2]	EEC	Canada [3,4]	United States [2,4]	Japan [3]	OECD [3]
1970	11 352	4 380	19 116	29 808	1 572	14 940	13 392	21 696	116 280	13 308	39 960	18 876	225 649
1971	12 390	4 476	21 261	34 356	1 838	16 026	15 159	23 918	129 403	15 460	45 633	19 716	250 717
1972	14 879	4 988	26 696	39 759	2 113	19 252	17 127	27 877	152 643	18 924	55 819	23 463	297 984
1973	21 936	7 704	37 380	54 492	2 784	27 816	24 360	38 872	215 232	23 304	69 120	38 316	410 820
1974	29 700	9 852	52 824	68 976	3 816	40 968	33 204	54 344	293 568	32 292	100 968	62 112	583 020
1975	30 708	10 332	54 240	74 208	3 804	38 364	35 148	53 618	300 048	33 960	96 936	57 864	587 376
1976	35 352	12 420	64 392	87 780	4 200	43 368	39 948	56 269	343 428	37 956	121 788	64 800	676 308
1977	40 248	13 260	70 488	100 704	5 388	47 556	45 600	63 740	386 940	39 540	147 852	70 812	765 936
1976 1st quarter	7 656	2 823	14 925	19 836	999	9 984	8 826	13 335	78 602	9 249	27 308	14 946	154 935
2nd	7 995	3 000	15 495	20 967	994	10 644	9 378	13 942	82 413	9 567	29 290	15 546	162 039
3rd	8 427	3 165	16 413	22 475	1 068	10 737	10 086	14 386	86 680	9 582	32 024	16 863	173 049
4th	9 174	3 330	17 493	24 078	1 121	11 859	11 607	14 606	93 334	9 486	32 652	17 256	182 874
1977 1st quarter	9 513	3 317	17 409	24 170	1 258	11 781	11 292	15 322	94 292	9 885	35 405	17 664	186 291
2nd	9 483	3 240	17 196	24 115	1 271	12 276	11 214	16 429	95 020	10 119	37 721	17 484	190 467
3rd	9 414	3 385	17 721	25 593	1 422	11 010	11 514	15 779	95 811	9 948	37 600	17 832	192 681
4th	10 143	3 344	18 658	27 435	1 481	12 458	11 816	16 210	101 804	9 840	37 640	18 099	198 207
1978 1st quarter [5]	11 066	3 411	19 018	28 054	1 551	11 637	12 317	19 023	105 698	9 694		18 444	
2nd								18 690					
1976 October	2 982	1 096	5 796	7 740	363	3 745	3 617	4 724	30 118	3 119	10 771	5 744	(58 934)
November	3 091	1 099	5 958	7 710	383	4 389	3 499	4 947	31 100	3 218	10 731	5 888	(61 315)
December	3 100	1 134	5 740	8 627	375	3 726	4 490	4 935	32 117	3 148	11 150	5 625	(62 477)
1977 January	3 204	1 087	5 912	8 220	443	3 821	3 846	5 520	32 116	3 243	11 371	6 009	(62 340)
February	3 102	1 038	5 702	7 834	406	4 008	3 807	4 872	30 794	3 319	11 697	5 732	(61 084)
March	3 206	1 192	5 796	8 116	410	3 950	3 637	4 930	31 382	3 321	12 337	5 922	(62 727)
April	3 150	1 022	5 515	7 745	406	4 167	3 727	5 183	30 872	3 425	12 593	5 859	(62 469)
May	3 171	1 085	5 740	8 170	426	4 206	3 727	5 394	31 863	3 391	12 334	5 850	(63 156)
June	3 161	1 134	5 943	8 201	439	3 902	3 761	5 851	32 285	3 302	12 793	5 775	(64 805)
July	2 854	1 073	5 692	8 606	461	3 700	3 788	5 475	31 510	(3 328)	12 781	(5 788)	(63 948)
August	3 390	1 137	6 052	8 393	468	3 736	3 963	4 936	32 140	(3 257)	12 167	(6 067)	(64 539)
September	3 171	1 175	5 975	8 594	493	3 574	3 762	5 369	32 161	(3 267)	12 652	(5 856)	(64 079)
October	3 148	1 089	5 944	8 557	472	4 144	3 741	5 337	32 562	3 268	11 954	5 769	63 591
November	3 390	1 092	6 429	8 773	477	3 910	3 911	4 998	33 321	2 961	11 581	6 006	64 162
December	3 605	1 163	6 285	10 105	532	4 404	4 164	5 875	35 921	3 611	14 105	6 324	70 454
1978 January [5]	3 723	1 147	6 503	9 824	582	3 700	4 171	6 334	35 935	3 024		6 234	
February	3 719	1 134	6 137	9 252	505	4 035	4 202	6 126	34 776	3 711		6 311	
March	3 624	1 130	6 378	8 978	464	3 902	3 944	6 563	34 987	2 959		5 899	
April	3 593	1 184	6 724	10 104	528	4 514	4 410	5 603	26 690	4 242		6 588	
May		1 166	6 491		592			6 605					
June								6 479					
July								6 558					

[1] For most purposes special trade may be defined as trade excluding re-exports. [2] General trade. [3] The OECD has revised the seasonally adjusted figures. It has been possible to include only the published revisions at this stage. For this reason the monthly figures in brackets do not necessarily add to the quarters. [4] fob. [5] In these tables, from January 1978, the trade of Ireland and the United Kingdom is classified according to SITC Rev 2. The changes are described in an article in 'Trade and Industry' 10 February 1978, which also gives for the UK an indication of the magnitude of the change. It is thought that other countries have also adopted this classification from the beginning of 1978, but the extent of the discontinuity has not been ascertained. Percentage changes may be misleading and have therefore been omitted.

Source: United Kingdom, Department of Trade. All others: 'OECD Series "A" '

Table 10 **Balance of payments on current account**

US $ million (unadjusted)

	Belgium/ Luxembourg	Denmark	France	F.R. of Germany	Ireland	Italy	Nether-lands	United Kingdom	EEC	Canada	United States	Japan
1971	846	−423	530	876	−190	2 040	−159	2 615	6 135	424	−1 410	5 797
1972	1 142	−63	297	748	−135	2 289	1 290	337	5 905	−387	−5 989	6 624
1973	1 153	−464	−691	4 371	−234	−2 234	2 342	−2 137	2 106	107	6 881	−136
1974	911	−981	−5 942	9 802	−671	−8 039	2 061	−8 220	−11 079	−1 487	1 720	−4 693
1975	705	−488	−3	4 051	−24	−556	1 992	−3 673	2 004	−4 696	18 456	−682
1976	−296	−1 909	−6 033	3 889	−262	−2 859	2 689	−1 507	−6 288	−3 841	4 339	3 680
1977	−308	−1 647	−3 245	3 848			254	344		−3 930	−15 207	10 592
1975 1st quarter	558	−82	−371	2 267		−511	134	−1 499		−1 857	4 597	−925
2nd	77	54	941	819		119	921	−842		−1 102	5 614	−300
3rd	−95	−76	−128	−395		871	276	−1 235		−659	2 005	−23
4th	165	−383	−446	1 360		−1 035	661	− 98		−1 079	6 237	566
1976 1st quarter	−369	−591	−1 313	1 373		−1 472	865	−96		−1 810	2 678	−110
2nd	30	−417	−522	900		−1 390	381	−497		−1 066	2 681	941
3rd	−293	−398	−2 472	−336		832	481	−450		−16	−2 397	984
4th	336	−504	−1 725	1 952		−829	961	−464		−948	1 377	1 865
1977 1st quarter	15	−480	−1 631	998		−922	175	−896		−1 484	−2 335	889
2nd	−167	−395	−475	1 102		161	−144	−603		−1 173	−2 487	2 181
3rd	−294	−398	−1 198	−2 020		2 391	−193	921		−511	−5 180	3 300
4th	139	−375	59	3 768			416	922		−762	−5 205	4 581
1978 1st quarter							−322	−802		−1 276	−6 465	4 002

Source: United Kingdom Economic Trends. All others: IMF International Financial Statistics.

industrial price controls and the ending of subsidies to state run industries, the second half of the year may show an acceleration in the inflation rate. Temporary measures taken to encourage the employment of young people have reduced youth unemployment. However, the situation remains serious, with the numbers of unemployed moving upwards since the early months of the year.

Italy

The contractionary phase which began in the second quarter of 1977 gave way to a rapid recovery in activity in the early months of 1978, but it appears the upswing was largely the result of temporary factors. There was a pick up in private consumption following a substantial increase in pensions at the beginning of 1978 and also some rebuilding of stocks in the distributive sector. Gdp rose by 2 per cent from the last quarter of 1977 to the first quarter of 1978. Industrial production also expanded sharply in the first quarter, but fell back in April and is thought to have only partly recovered in May and June. Valued in national currency, in the first half of 1978 Italian exports are reported as having increased by 11.9 per cent while imports rose only 0.7 per cent on a year earlier, reducing the trade deficit to 177 billion lire compared with 2300 billion lire in the first half of 1977. A fall in import prices at the turn of the year and a slowdown in the rate of increase in wage costs has had a restraining influence on inflation, though the decline in the annual rate appears to have halted. The numbers unemployed in the first six months of this year were nearly 3 per cent higher than in the same period last year. Short-time working is thought to have increased rapidly in the early months of this year.

Exports of manufactures

The US dollar value of exports of manufactures by the main manufacturing countries rose by 14 per cent in 1977 compared with 1976. The volume increase was just under 4½ per cent. The United Kingdom's value share at 9.3 per cent returned to the levels of 1973 and 1975. The Japanese also increased their share of exports of manufactures but the share of the United States fell from 17.2 per cent in 1976 to 15.7 in 1977 reflecting severe weather conditions at the beginning of the year and an autumn dock strike. There was a sharp loss in the United Kingdom's export price competitiveness in the first quarter of 1977 and the

Table 11 Export volume (1970 = 100) [1]

		Belgium/ Luxembourg	Denmark	France	F.R. of Germany	Ireland	Italy	Netherlands	United Kingdom [3]	EEC	Canada	United States	Japan r	OECD [1]
1971		105	105	109	106	116	108	113	109	108	105	99	121	107
1972		120	113	124	115	122	120	121	111	117	113	108	128	117
1973		139	125	138	135	135	123	143	126	133	123	133	135	132
1974		139	132	150	150	143	132	146	132	143	119	144	157	141
1975		130	130	144	135	152	135	139	129	135	110	141	159	135
1976		148	133	157	152	159	151	153	141	149	124	145	194	149
1977		155	138	168	161	189	164	157	154	158	137	146	205	157
1974	1st quarter	140	133	152	154	145	132	144	128	143	121	142	141	*(139)*
	2nd	141	126	147	151	136	129	146	133	142	116	148	156	*(141)*
	3rd	140	135	150	149	141	137	152	138	148	122	144	161	*(142)*
	4th	134	134	150	146	148	130	140	130	139	117	141	168	*(140)*
1975	1st quarter	130	125	146	133	150	133	135	130	134	110	142	158	*(135)*
	2nd	124	128	140	134	141	132	136	125	132	111	135	151	*(131)*
	3rd	125	126	142	133	158	136	137	127	133	107	142	155	*(133)*
	4th	140	139	146	140	160	140	149	135	141	113	145	173	*(141)*
1976	1st quarter	140	127	148	145	143	145	145	136	142	120	140	192	143
	2nd	144	131	157	151	160	150	145	140	147	125	146	195	148
	3rd	149	137	159	156	160	151	156	140	151	126	148	195	151
	4th	157	137	162	155	172	157	164	146	155	126	145	193	152
1977	1st quarter	156	140	163	157	176	158	156	149	154	137	146	204	154
	2nd	153	131	163	160	176	169	150	153	156	135	147	202	155
	3rd	153	137	168	160	204	155	159	160	158	135	148	206	157
	4th	159	145	178	166	201	172	162	153	164	141	142	208	161
1978	1st quarter	154	134	169	159		156		157		142		219	
	2nd								158					

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[1] The volume figures other than for the UK are derived from the figures in table 8 and the average value indices published by the OECD converted to dollar terms. The notes on table 8 apply to this table also. In particular percentage changes have been omitted because they may be misleading. [2] See note 2 to table 12 below. [3] New index on 1975 base rescaled to 1970 = 100. r Revised.

Source: United Kingdom: Department of Trade.

Table 12 Import volume (1970 = 100)[1]

		Belgium/ Luxembourg	Denmark	France	F.R. of Germany	Ireland	Italy	Netherlands	United Kingdom[3]	EEC	Canada	United States	Japan r	OECD[2]
1971		104	95	107	110	109	101	106	105	106	110	109	100	105
1972		114	99	123	122	116	111	110	116	116	129	124	113	117
1973		138	116	140	130	138	125	127	132	130	149	130	145	131
1974		138	108	146	127	132	119	123	133	128	164	127	142	131
1975		129	106	135	131	121	105	117	124	121	155	112	123	122
1976		143	127	163	151	141	120	130	132	138	166	136	137	138
1977		151	124	165	161	158	120	135	135	142	168	154	142	146
1974	1st quarter	142	119	150	122	131	125	123	131	129	162	125	146	*(131)*
	2nd	139	110	147	126	140	118	121	136	128	161	129	144	*(131)*
	3rd	140	105	146	131	139	122	127	134	130	166	129	141	*(132)*
	4th	130	99	139	129	119	110	119	131	124	165	126	137	*(128)*
1975	1st quarter	124	97	132	124	117	100	117	126	118	155	113	121	*(120)*
	2nd	127	99	129	129	116	98	114	118	117	155	103	116	*(117)*
	3rd	128	106	133	132	118	106	114	127	121	151	113	125	*(121)*
	4th	138	121	147	138	131	116	123	125	129	158	119	128	*(128)*
1976	1st quarter	137	120	152	142	131	120	120	125	131	164	125	128	130
	2nd	140	126	159	149	138	117	126	133	136	167	132	134	135
	3rd	144	130	167	153	142	115	131	134	139	166	142	142	141
	4th	151	130	172	159	151	128	143	135	146	168	143	142	145
1977	1st quarter	153	125	165	158	154	123	136	136	143	170	151	141	148
	2nd	149	122	160	154	151	125	131	139	140	173	157	140	144
	3rd	148	125	163	161	165	108	134	134	139	165	154	140	144
	4th	154	123	170	169	163	124	137	131	146	165	154	145	147
1978	1st quarter	156	120	168	164		122		144		159		147	
	2nd								144					

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[1] The volume figures other than for the UK are derived from the value figures in table 9 and the average value indices published by the OECD converted to dollar terms. The notes to table 9 apply to this table also. In particular percentage changes have been omitted because they may be misleading. [2] The OECD has revised the seasonally adjusted figures. It has been possible to include only the published revisions at this stage. For this reason there is a discontinuity in figures prior to 1976, indicated in brackets. [3] New index on 1975 base rescaled to 1970 = 100. r Revised.

Source: United Kingdom: Department of Trade.

Table 13 Exports of manufactures by the main manufacturing countries[1]

Value US $ thousand million (fob) Quarters or quarterly averages

	Canada	United[2 3] States[1]	Japan	Sweden[4]	Switzerland	Belgium/ Luxembourg	France	F.R. of Germany[3]	Italy	Netherlands[3]	United[3] Kingdom[3] (seasonally adjusted)	Total[1] (seasonally adjusted)	UK share per cent
1970	2.39	7.17	4.53	1.31	1.16	2.40	3.40	7.67	2.77	1.70	4.08	38.57	10.6
1971	2.61	7.42	5.66	1.44	1.31	2.57	3.85	8.75	3.16	2.02	4.77	43.54	10.9
1972	2.94	8.27	6.77	1.68	1.57	3.31	4.76	10.38	3.91	2.53	5.16	51.27	10.1
1973	3.42	10.95	8.69	2.34	2.17	4.57	6.52	15.08	4.65	3.44	6.41	68.23	9.4
1974	4.13	15.57	13.12	3.03	2.73	5.76	8.40	19.74	6.22	4.74	8.01	91.44	8.8
1975	4.17	17.36	13.29	3.46	3.01	5.70	10.03	19.90	7.29	4.83	9.15	98.19	9.3
1976	5.16	18.99	16.14	3.69	3.42	6.51	10.75	22.68	7.79	5.58	9.63	110.35	8.7
1977	5.91 p	19.73	19.46	3.84	4.01 p	7.26	12.27	26.08	9.50	5.97	11.69	125.72 p	9.3 p
1975 1st quarter	3.97	16.89	12.51	3.54	2.95	6.16	10.25	19.78	6.92	4.86	9.37	99.24	9.4
2nd	4.35	17.93	13.04	3.77	3.13	6.00	10.98	21.02	7.28	5.13	9.11	98.67	9.2
3rd	3.73	16.48	13.14	2.91	2.71	4.72	8.62	18.40	7.19	4.16	8.77	94.97	9.2
4th	4.63	18.16	14.48	3.62	3.25	5.92	10.27	20.41	7.76	5.16	9.33	99.89	9.3
1976 1st quarter	4.63	18.22	13.80	3.51	3.08	6.07	10.40	20.80	6.81	5.01	9.58	104.64	9.2
2nd	5.58	19.94	15.75	3.68	3.44	6.64	11.23	21.90	7.46	5.31	9.49	106.62	8.9
3rd	4.99	17.96	16.79	3.45	3.20	5.83	9.62	22.26	7.84	5.38	9.60	111.79	8.6
4th	5.44	19.83	18.23	4.12	3.95	7.39	11.75	25.77	9.07	6.61	9.88	118.36	8.3
1977 1st quarter	5.78 p	19.40	17.22	3.88	3.57 p	7.25	11.89	24.73	8.45	5.91	10.55	121.80 p	8.7 p
2nd	6.27 p	20.59	18.98	4.00	3.77 p	7.46 p	12.53	25.38	9.61	5.91	11.54	121.64 p	9.5 p
3rd	5.32 p	19.13	19.87	3.19	3.82 p	6.55	11.15	24.88	9.12	5.68	12.20	126.39 p	9.7 p
4th	6.29 p	19.80	21.76	4.29	4.88 p	7.78	13.51	29.31	10.82	6.37	12.49	132.89 p	9.4 p
1978 1st quarter	6.34 p	20.27 e	21.16	3.97	4.74 p		13.70 p	28.68		6.71	13.84		
2nd		23.70 e									13.50		

Volume index 1970 = 100

	Canada	United States	Japan	Sweden	Switzerland	Belgium/ Luxembourg	France	F.R. of Germany	Italy	Netherlands	United Kingdom (seasonally adjusted)	Total (seasonally adjusted)	Relative volume UK as percentage of total
1971	106	101	120	105	103	106	108	106	107	115	110	108	102.3
1972	115	111	129	107	111	123	122	116	124	128	112	117	95.8
1973	128	135	136	125	122	138	134	134	133	146	128	133	96.2
1974	129	158	159	134	127	140	152	150	146	155	135	148	91.2
1975	123	152	162	126	115	128	149	133	146	146	130	141	92.8
1976	139	156	200	129	131	147	164	152	166	169	140	157	89.6
1977	168 p	154	212	127	145 p		174	158			152	163 p	92.7
1975 1st quarter	112	151	144	128	110	129	153	127	136	137	134	138	96.9
2nd	127	157	153	131	121	130	155	135	144	147	127	137	92.7
3rd	113	144	162	110	99	112	132	127	145	133	127	139	91.6
4th	138	156	189	135	129	143	157	144	158	167	133	148	90.3
1976 1st quarter	125	153	182	128	122	143	158	145	153	159	137	153	89.5
2nd	148	165	201	132	132	154	171	150	167	166	141	154	91.2
3rd	133	147	206	121	123	133	147	148	161	164	139	158	88.3
4th	149	158	212	135	148	160	178	163	183	187	144	162	89.3
1977 1st quarter	151 p	155	193	124	134 p	155	173	154	165	172	144	163 p	88.7 p
2nd	165 p	163	208	131	141 p	157	182	158	183	170	154	161 p	95.8 p
3rd	143 p	147	218	106	140 p	136	156	150	168	163	158	164 p	96.3 p
4th	173 p	150	228	146	162 p		184	171			150	167 p	89.9 p

Unit value index in US $ 1970 = 100

	Canada	United States	Japan	Sweden	Switzerland	Belgium/ Luxembourg	France	F.R. of Germany	Italy	Netherlands	United Kingdom	Weighted average ex UK	Ratio of UK to weighted average
1976 weights	0.0445	0.1629	0.1594	0.0421	0.0345	0.0613	0.1098	0.2518	0.0790	0.0546			
1971	103	102	104	105	109	101	105	108	106	104	107	105	102.2
1972	107	104	116	120	122	112	115	117	114	117	116	113	102.6
1973	112	113	141	143	154	137	143	147	126	139	127	135	94.1
1974	134	137	181	173	185	171	162	172	154	178	152	163	93.1
1975	142	159	178	210	220	185	197	195	180	195	176	182	96.5
1976	156	170	178	219	224	184	194	195	169	194	175	184	94.9
1977		179	203				208	214			201		
1975 1st quarter	148	156	192	211	231	199	197	203	184	209	177	189	93.9
2nd	143	159	186	220	224	192	208	203	183	205	181	189	95.5
3rd	138	159	179	202	210	176	193	189	179	185	173	179	96.7
4th	141	162	169	206	217	172	193	185	177	182	173	177	97.8
1976 1st quarter	155	166	167	209	218	177	194	187	161	186	177	178	99.3 p
2nd	158	168	173	214	224	180	193	190	161	189	171	181	94.4
3rd	157	170	180	218	225	183	193	196	176	194	177	186	95.2
4th	153	175	190	234	230	194	194	206	179	208	175	193	90.6
1977 1st quarter	161	175	197	240	224	195	202	209	185	203	190	196	96.9 p
2nd	159	176	201	234	230	198	203	210	189	205	195	198	98.3
3rd	156	181	201	230	236	201	211	216	196	206	202	202	100.0 p
4th	152	184	211	225	259		216	223			217	207	104.8 p
1978 1st quarter			224										

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[1] See special note at end of text. [2] Excluding 'special category exports' for which detailed information on countries of destination is withheld by the United States authorities. [3] SITC (rev 2) from 1 January 1978. [4] SITC (rev 2) from 1 January 1977. p Provisional.

Sources: Values. United Kingdom and total: DTI. Other countries: OECD updated from national sources. Volume. Derived from the value figures and the unit value index numbers.
Unit values. United Kingdom and total: DTI. Other countries: United Nations. The weighting reflects the relative importance of each country in UK's overseas markets. The ratio indicates the UK competitive position.

position continued to deteriorate throughout the year.

Special note to table 13

Comparisons of trade in manufactures in 1978 with earlier periods may be misleading. A number of countries are now classifying their trade according to SITC (Rev 2). Countries whose figures are known to be on this classification from 1 January 1978 are United States, the Federal Republic of Germany and the United Kingdom. The Swedish figures shown have been based on SITC (Rev 2) since the beginning of 1977. The Netherlands publishes a conversion table which can be used to convert their statistics to the new classification. There have been other changes to the United Kingdom's external trade statistics details of which were given in an article in *Trade and Industry* of 10 February 1978. Under SITC (rev 2) there has been a change in the coverage of manufactured goods. The magnitude of the change is indicated in the table below for countries which have published figures on both SITC (R) and SITC (Rev 2) for one year.

EXPORTS OF MANUFACTURES (SITC 5–8) US $ billion

	SITC (R) 1977	SITC (rev 2) 1977
United States [1]	80.45	80.17
United Kingdom	46.77	47.43
Netherlands	23.87	23.79 e
	1975	1975
Sweden	13.83	13.81

[1] Includes special category exports. e Estimated.

Inquiries: DTIPCP Common Services, Room 241A, 1 Victoria Street, London SW1H 0ET, tel. 01-215 3126.

Guide to government statistics

see centre pages
Trade and Industry, 21 July 1977

Cost indices for the aerospace and radio, radar and electronic capital goods industries

June's cost indices for the aerospace and radio, radar and electronic capital goods industries are given in the table. Attention is drawn to the footnotes: an explanation of the compilation of the indices was given in the introductory article in *Trade and Industry*, 3 February.
Inquiries: 01-215 3514.

Cost indices for the aerospace and radio, radar and electronic capital goods industries (MLH 383 and 367 respectively) 1970 = 100

	1977							1978					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1 BOUGHT OUT FINISHED GOODS PURCHASED BY	p	p	p	p	p	p	p	p	p	p	p	p	p
Aerospace industry	259.2	261.7	261.9	264.0	267.6	272.2	273.1	275.5	277.2	280.3	285.5	287.4	289.5
Airframe sector	255.0	257.5	258.2	259.8	263.5	267.9	268.8	271.4	273.1	276.1	280.9	282.7	284.7
Aero-engine and aero-engine parts sector	262.5	265.1	265.2	267.6	270.9	275.4	276.6	279.1	280.9	284.0	289.5	291.4	293.2
Aero-engine parts sector	257.3	260.3	262.2	263.8	267.5	270.7	272.5	276.2	277.9	280.5	284.6	286.2	287.4
Aircraft components sector	264.4	267.0	266.8	269.1	272.2	276.4	277.4	279.2	281.0	284.3	289.7	291.8	293.7
2 OTHER MATERIALS PURCHASED BY													p
Aerospace industry	309.9	313.5	315.2	318.3	319.8	317.3	317.1	316.6	316.9	319.5	323.0	325.0	327.3
Airframe sector	292.0	297.3	301.2	303.4	304.8	302.9	303.6	304.0	304.5	305.9	308.5	309.7	311.2
Aero-engine and aero-engine parts sector	304.9	307.9	310.2	315.6	318.9	317.6	317.5	319.3	319.6	321.4	324.0	325.5	329.2
Aero-engine sector	327.6	330.3	330.5	333.8	335.2	332.2	331.3	330.0	330.4	334.3	338.4	341.1	342.2
Aircraft components sector	318.9	322.2	322.7	324.0	324.3	320.8	320.4	317.9	317.9	321.5	325.9	328.6	329.6
3 ALL PURCHASES OF GOODS BY	p	p	p	p	p	p	p	p	p	p	p	p	p
Aerospace industry	276.0	278.8	279.5	282.0	284.8	287.1	287.7	289.1	290.3	293.3	297.8	299.8	302.0
Airframe sector	263.5	266.6	268.1	269.8	273.0	275.9	275.8	278.9	280.3	283.0	287.2	288.9	290.8
Aero-engine and aero-engine parts sector	277.8	280.5	281.3	284.8	288.2	290.5	291.3	293.5	294.8	297.5	301.8	303.7	306.1
Aero-engine parts sector	285.8	288.6	289.8	292.1	294.9	295.6	296.3	298.0	299.1	302.3	306.2	308.4	309.6
Aircraft components sector	296.5	299.5	299.7	301.5	302.9	302.5	302.7	302.0	302.7	306.3	310.9	313.5	314.8
Radio, radar and electronic capital goods industry	257.1	259.6	260.8	262.1	265.2	268.2	268.2	270.5	272.0	275.2	278.6	280.5	282.7
4 SALARIES AND GENERAL EXPENSES	p	p	p	p	p	p	p	p	p	p	p	p	p
Aerospace industry	253.7	255.6	253.8	256.2	259.6	265.4	266.4	267.9	269.5	272.6	279.4	281.2	283.6
Airframe sector	251.8	253.6	251.6	254.2	257.7	264.0	265.1	266.5	268.4	271.5	278.3	280.2	282.6
Aero-engine and aero-engine parts sector	259.3	261.1	259.5	261.9	265.1	270.6	271.6	273.1	274.7	277.6	284.0	285.8	288.1
Aero-engine parts sector	252.4	254.4	253.0	255.4	258.6	264.1	265.1	266.7	268.3	271.5	278.0	279.9	282.2
Aircraft components sector	248.4	250.2	248.3	250.7	254.1	260.1	261.1	262.4	264.2	267.3	274.0	275.8	278.3
Radio, radar and electronic capital goods industry	233.6	235.4	233.0	235.5	239.0	245.5	246.5	247.5	249.3	252.3	259.0	260.9	263.4
5 HOURLY EARNINGS OF ADULT MANUAL WORKERS						p	p	p	p	p	p	p	p
Aerospace industry	257.2	259.0	256.0	258.9	262.9	272.3	273.6	274.7	277.1	281.1	289.9	292.3	295.5
Radio, radar and electronic capital goods industry	276.0	277.3	279.3	279.4	288.3	302.0	294.4	297.6	299.7	307.1	311.8	316.2	322.4
6 COMBINED COSTS	p	p	p	p	p	p	p	p	p	p	p	p	p
Aerospace industry	263.2	265.4	264.4	266.9	270.2	275.5	276.4	277.7	279.4	282.7	289.0	291.1	293.5
Airframe sector	257.2	259.5	258.5	260.9	264.4	270.2	271.2	272.8	274.6	277.8	284.1	286.1	288.6
Aero-engine and aero-engine parts sector	265.7	267.8	266.8	269.8	273.2	278.5	279.5	281.1	282.8	285.9	292.1	294.1	296.6
Aero-engine parts sector	263.9	266.0	264.9	267.4	270.8	276.1	277.1	278.6	280.3	283.7	290.2	292.4	294.7
Aircraft components sector	265.9	268.0	266.4	268.8	271.8	277.0	277.8	278.4	280.1	283.6	290.4	292.6	295.0
Radio, radar and electronic capital goods industry	251.6	253.0	253.5	255.1	259.3	265.4	264.5	266.5	268.2	272.0	276.8	279.2	282.1

Definitive information on earnings for both manual and administrative, technical and clerical (ATC) workers is available only for certain months of the year – manual earnings information is available for MLH 383 for April and October but for MLH 367 in respect of October only; ATC salaries information for both industries is available for April of each year. The indices of combined costs are based on the assumption of no change in productivity.

Revisions to series brought about as a result of ATC salaries information becoming available will be shown in the article to be published on 8 December and will affect indices from May last year up to and including those of August.

Revisions to series incorportated as a result of manual earnings information from the October survey are published in the April article and these affect series from the preceding November up to and including December. The results obtained from the April aerospace survey will affect indices from last November up to and including June and will be shown in the article published on 6 October.

The cost index tables previously D1-D5 and D7 have now been redesignated sections 1 to 6 in the table.

p Provisional

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United Kingdom trade in the second quarter of 1978

Changes have been made to the methodology of the index numbers (see note 1)

Section 1: Recent movements in visible trade – balance of payments basis

Total trade and oil (tables 1 to 3)
In the second quarter of 1978 there was a visible trade deficit of £135 million compared with the erratically large deficit of £612 million in the previous quarter. A favourable movement of some £190 million in the balance on the more erratic items of trade (especially precious stones and ships) to a relatively high surplus, together with an unduly large reduction of around £230 million in the deficit on trade in oil, largely accounted for the improvement of some £480 million in the visible balance between the two quarters.

Total exports were valued at £8,759 million, 4 per cent (£349 million) above the first quarter level, with the bulk of the improvement accounted for by increased trade in the more erratic items and in oil, where deliveries rose by £216 million and £67 million respectively. The value of imports was £8,894 million, 1½ per cent (£128 million) below the high first quarter level, with imports of oil, which were erratically low in June, falling by £159 million.

The improvement in the visible balance between these quarters was attributable to a rise of 6 per cent in relative volume, as export volume rose by 2 per cent (1 per cent excluding the more erratic factors) compared with a decrease of 4 per cent in the import volume index. The underlying trend in export volume is probably only slightly upwards, with the second quarter level still below that of the relatively buoyant third quarter of 1977.

Despite the fall in the second quarter, import volume remained above the levels recorded during 1977, and the underlying trend is almost certainly upwards.

In the second quarter, the deficit on trade in petroleum and petroleum products was reduced substantially to £420 million, with exports increasing by 14 per cent to £535 million and imports 14 per cent lower at £955 million. The value of crude oil exports at £290 million was close to the record level achieved in the third quarter of 1977, and crude oil imports were valued at £735 million. The volume of crude oil imports fell by 18 per cent to 14.1 million tonnes, while prices rose by 4 per cent. Combined with favourable movements in trade in petroleum products, the oil deficit was at its lowest quarterly level since the oil price rise at the end of 1973 and around two-fifths of the record deficit of £1,058 million recorded in the third quarter of 1976.

In the second quarter, with the export unit value index increasing by 2½ per cent and the import value index up by 3 per cent, the terms of trade declined by ½ per cent.

Table 1 Total trade: value, volume and unit value indices

Seasonally adjusted except unit values. Balance of payments basis

				Unit value indices (not seasonally adjusted)			Volume indices		
	Exports fob	Imports fob	Visible balance	Exports	Imports	Terms of trade [1]	Exports	Imports	Relative volume index [2]
	£m	£m	£m	1975=100	1975=100	1975=100	1975=100	1975=100	1975=100
1970	8 121	8 163	−42	51.0	42.3	120.4	80.1	82.5	97.1
1971	9 060	8 799	+261	53.9	44.3	121.7	85.4	85.7	99.6
1972	9 450	10 172	−722	56.9	46.7	121.8	85.2	95.3	89.4
1973	12 115	14 498	−2 383	64.0	59.6	107.4	97.8	108.7	90.0
1974	16 538	21 773	−5 235	81.7	87.4	93.5	104.3	109.7	95.1
1975	19 463	22 699	−3 236	100.0	100.0	100.0	100.0	100.0	100.0
1976	25 424	29 013	−3 589	120.7	121.6	99.3	109.8	105.7	103.9
1977	32 182	33 891	−1 709	142.4	141.4	100.7	118.9	107.1	111.0
1976									
1st qtr	5 654	6 204	−550	110.7	109.8	100.8	106.2	100.2	106.0
2nd	6 160	7 109	−949	116.9	118.4	98.8	109.7	106.3	103.2
3rd	6 513	7 645	−1 132	123.9	124.4	99.6	110.1	109.0	101.0
4th	7 097	8 055	−958	131.3	133.7	98.2	113.4	107.1	105.9
1977									
1st qtr	7 512	8 485	−973	135.7	137.2	98.9	115.8	109.4	105.9
2nd	7 927	8 689	−762	141.4	141.0	100.3	118.0	109.6	107.7
3rd	8 556	8 525	+31	145.2	143.7	101.0	124.4	106.6	116.7
4th	8 187	8 192	−5	147.3	143.8	102.4	117.6	102.7	114.5
1978									
1st qtr	8 410	9 022	−612	149.6	142.6	104.9	119.9	114.1	105.1
2nd	8 759	8 894	−135	153.7	147.1	104.5	122.2	109.6	111.5
Percentage change Q2/Q1	+4	−1½		+2½	+3	−½	+2	−4	+6

[1] Export unit value index as percentage of import unit value index. [2] Export volume index as percentage of the import volume index.

Table 2 Value and volume of exports and imports excluding the more erratic items [1]

Seasonally adjusted. Balance of payments basis

	Exports fob		Imports fob		
	Value	Volume index	Value	Volume index	Relative volume index
	£m	1975=100	£m	1975=100	1975=100
1975	18 081	100.0	20 920	100.0	100.0
1976	23 382	108.9	27 056	106.9	101.9
1977	29 520	118.1	31 187	107.5	109.9
1976					
1st qtr	5 245	106.2	5 863	102.7	103.4
2nd	5 613	108.0	6 483	105.2	102.7
3rd	6 003	109.5	7 094	109.7	99.8
4th	6 521	112.2	7 616	109.9	102.1
1977					
1st qtr	6 934	115.2	7 940	111.4	103.4
2nd	7 281	117.3	7 748	106.6	110.0
3rd	7 796	122.8	7 931	108.5	113.2
4th	7 509	117.0	7 568	103.7	112.8
1978					
1st qtr	7 811	121.0	8 391	116.3	104.0
2nd	7 944	122.3	8 234	111.3	109.9
Percentage change Q2/Q1	+1½	+1	−2	−4½	+5½

[1] These are defined as ships, North Sea production installations, aircraft and precious stones.

Table 3 Trade in oil

Seasonally adjusted. Balance of payments basis

		Exports			Imports				
	balance of visible trade	Total	Crude oil [1]	Rest of division	Total	Crude oil			Rest of division
	£m fob	£m fob	£m fob	£m fob	£m fob	£m fob	Million tonnes	Average value per tonne £ fob	£m fob
1970	−486	180	8	172	666	470	100.8	4.7	196
1971	−653	216	10	206	869	664	107.3	6.2	205
1972	−660	222	21	201	882	667	104.3	6.4	215
1973	−948	344	23	321	1 292	941	113.3	8.3	351
1974	−3 425	711	29	682	4 136	3 348	110.8	30.2	788
1975	−3 111	731	30	701	3 842	3 069	86.9	35.3	773
1976	−3 973	1 172	178	994	5 145	4 089	87.0	47.0	1 056
1977	−2 804	1 965	904	1 061	4 769	3 681	68.6	53.7	1 088
1976									
1st qtr	−947	221	18	203	1 168	925	21.8	42.7	243
2nd	−968	266	24	242	1 234	962	21.1	45.8	272
3rd	−1 058	307	45	262	1 365	1 080	22.2	48.8	285
4th	−1 000	378	91	287	1 378	1 122	21.9	51.1	256
1977									
1st qtr	−800	454	163	291	1 254	1 006	19.1	53.0	248
2nd	−745	516	239	277	1 261	988	18.2	54.3	273
3rd	−602	560	300	260	1 162	880	16.2	54.3	282
4th	−657	435	202	233	1 092	807	15.1	53.2	285
1978									
1st qtr	−646	468	268	200	1 114	866	17.3	50.0	248
2nd	−420	535	290	245	955	735	14.1	52.0	220
Percentage charge Q2/Q1		+14	+8½	+23	−14	−15	−18	+4	−11

[1] Not seasonally adjusted.

Area analysis (see table 4)
In the second quarter of 1978, there was a further small deterioration in our visible trade balance with the EEC, the deficit of £625 million being the highest recorded quarterly deficit since the second quarter of 1976. There was a small improvement of £21 million in the visible balance with the rest of western Europe to a deficit of £117 million.

The visible trade deficit with north America worsened from £226 million to £252 million in the second quarter. This represents a return to the high level of quarterly deficits in the second half of 1976 and the first half of 1977. Our trade with other developed countries was in balance in the second quarter for the first time since the third quarter of 1976, with imports sharply lower (especially arrivals of ships).

In the second quarter there was a sharp improvement in the surplus on visible trade with oil exporting countries, to £516 million, as exports continued to rise and imports fell back from a high first quarter level. The visible balance with the rest of the world improved to a surplus of £292 million.

Table 4 Trade by area

Seasonally adjusted. Balance of payments basis

£ million

	EEC			Rest of W. Europe			North America			Other developed countries		
	Exports	Imports	Visible balance	Exports	Imports	Visible balance	Exports	Imports	Visible balance	Exports	Imports	Visible balance
1970	2 347	2 308	+39	1 392	1 217	+175	1 221	1 709	−488	975	828	+147
1971	2 511	2 702	−191	1 519	1 404	+115	1 416	1 591	−175	1 077	856	+221
1972	2 835	3 426	−591	1 604	1 645	−41	1 553	1 635	−82	931	1 088	−157
1973	3 944	5 135	−1 191	2 055	2 338	−283	1 872	2 155	−283	1 208	1 416	−208
1974	5 581	7 623	−2 042	2 755	3 113	−358	2 260	2 963	−703	1 721	1 623	+98
1975	6 273	8 685	−2 412	3 086	3 157	−71	2 297	2 959	−662	1 847	1 862	−15
1976	9 052	11 179	−2 127	3 996	3 998	−2	3 043	3 869	−826	1 944	1 931	+13
1977	11 878	13 611	−1 733	4 868	4 623	+245	3 752	4 509	−757	2 095	2 483	−388
1976												
1st qtr	1 951	2 364	−413	826	841	−15	676	792	−116	485	430	+55
2nd	2 216	2 851	−635	985	987	−2	754	952	−198	479	433	+46
3rd	2 313	2 808	−495	1 047	1 124	−77	795	1 037	−242	496	495	+1
4th	2 572	3 156	−584	1 138	1 046	+92	818	1 088	−270	484	573	−89
1977												
1st qtr	2 753	3 265	−512	1 216	1 151	+65	867	1 128	−261	522	620	−98
2nd	2 997	3 366	−369	1 211	1 333	−122	931	1 189	−258	525	656	−131
3rd	3 093	3 488	−395	1 313	1 042	+271	1 050	1 205	−155	539	579	−40
4th	3 035	3 492	−457	1 128	1 097	+31	904	987	−83	509	628	−119
1978												
1st qtr	3 142	3 753	−611	1 069	1 207	−138	978	1 204	−226	538	702	−164
2nd	3 373	3 998	−625	1 203	1 320	−117	1 033	1 285	−252	572	571	+1
Percentage change Q2/Q1	+7½	+6½		+13	+9½		+5½	+7		+6	−19	

Table 4 *continued*

£ million

	Oil exporting countries			Rest of world			Total – all areas		
	Exports	Imports	Visible balance	Exports	Imports	Visible balance	Exports	Imports	Visible balance
1970	474	588	−114	1 712	1 513	+199	8 121	8 163	−42
1971	580	768	−188	1 957	1 478	+479	9 060	8 799	+261
1972	633	769	−131	1 889	1 609	+280	9 450	10 172	−722
1973	790	1 120	−330	2 246	2 334	−88	12 115	14 498	−2 383
1974	1 224	3 441	−2 217	2 997	3 010	−13	16 538	21 773	−5 235
1975	2 267	2 981	−714	3 693	3 055	+638	19 463	22 699	−3 236
1976	3 170	3 867	−697	4 216	4 169	+50	25 424	29 013	−3 589
1977	4 328	3 430	+898	5 261	5 235	+26	32 182	33 891	−1 709
1976									
1st qtr	693	840	−147	1 020	905	+115	5 654	6 204	−550
2nd	748	910	−162	1 023	1 046	−23	6 160	7 109	−949
3rd	799	1 075	−276	1 042	1 058	−16	6 513	7 645	−1 132
4th	930	1 042	−112	1 134	1 160	−26	7 097	8 055	−958
1977									
1st qtr	1 007	928	+79	1 127	1 304	−177	7 512	8 485	−973
2nd	1 061	933	+128	1 274	1 295	−21	7 927	8 689	−762
3rd	1 122	828	+294	1 393	1 359	+34	8 556	8 525	+31
4th	1 138	741	+397	1 467	1 277	+190	8 187	8 192	−5
1978									
1st qtr	1 159	818	+341	1 490	1 215	+275	8 410	9 022	−612
2nd	1 209	693	+516	1 433	1 141	+292	8 759	8 894	−135
Percentage change Q2/Q1	+4½	−15		−4	−6		+4	−1½	

Section 2: Recent movements in exports and imports – Overseas Trade Statistics basis

Exports by area (tables 6 and 7)
In the second quarter of 1978 exports were valued at £9,075 million, seasonally adjusted on an overseas trade statistics basis, 2½ per cent up on the first quarter of 1978. Deliveries to the developed countries rose by 5½ per cent, and exports to the developing countries by 1 per cent.

UK exports to the EEC rose in value by 7 per cent in the second quarter to £3,465 million. There were above average increases in exports to the Irish Republic, up 10 per cent from the broadly static level of the past three quarters, mainly due to increased shipments of finished manufactures, and to the Netherlands, up 9½ per cent, with higher exports of petroleum. Deliveries to Belgium and Luxembourg increased by 5½ per cent, mainly reflecting increased trade in precious stones, and shipments to Italy rose by 2 per cent in the

Dubai's new cement works built by Costain International for the National Cement Co of Dubai was handed over on 24 August. The cement works will have an output of 500 000 tonnes per annum.

second quarter, a slower rate than in the first. Exports to West Germany were up by 1 per cent and to France by 4½ per cent, but deliveries to Denmark fell by 3 per cent, reflecting a drop in exports of petroleum.

UK exports to the rest of western Europe were valued at £1,388 million in the second quarter of this year, an increase of 3 per cent on the first quarter. Deliveries to Switzerland remained at the high level of the previous quarter reflecting a high level of shipments of precious stones. Deliveries to Norway and Sweden rose by 4½ per cent and 1 per cent respectively. Exports to Spain were up by 10 per cent with the main increase in basic materials.

Shipments to north America rose by 5 per cent to £1,048 million. Exports to the United States were up by 5½ per cent including rises in crude oil and chemicals and to Canada by 3½ per cent in comparison with the first quarter of this year.

Exports to the other developed countries, taken as a group, rose by 6½ per cent to a level of £583 million. Within this group, shipments to South Africa increased by 10 per cent continuing the rise from the low level of the fourth quarter 1977. Exports to Australia rose by 6½ per cent, and although exports to Japan were 2½ per cent higher, there has been little general change in the level over the past four quarters. Deliveries to New Zealand, the smallest of the four markets, fell by 8½ per cent.

Exports to the developing countries were up by 1 per cent to £2,400 million, following a similarly small rise in the first quarter. Within the group, deliveries to the oil-exporting countries rose by 4 per cent to £1,232 million. Shipments to Saudi Arabia and Iran both fell by around 2 per cent after increases in the first quarter, while deliveries to Nigeria rose by 16 per cent to £326 million having been little changed in the previous four quarters. Outside the oil exporting countries, shipments to India and Israel fell by 22 and 9½ per cent, respectively. Deliveries of goods to Brazil rose by 8 per cent in this quarter, mainly due to an increase in exports of transport equipment.

Exports to the centrally planned economies fell sharply – by 13 per cent – in the second quarter to £256 million, following the high level of £293 million in the first quarter. Deliveries to the Soviet Union were down by 24 per cent, following the 87 per cent rise in the previous quarter, mainly due to reductions in machinery and transport equipment. Exports to Poland were up by 15 per cent, maintaining an inprovement in exports so far this year.

Exports by commodity

(tables 8 to 12)

Exports of manufactured goods in the second quarter of 1978 accounted for 81 per cent of total exports and at £7,344 million, seasonally adjusted on an overseas trade statistics basis, rose by 2½ per cent in value and marginally in volume by comparison with the previous quarter. Excluding the more erratic items, both value and volume rose by 1 per cent.

Machinery exports, at £2,271 million, were 3½ per cent higher by value in the second quarter with volume up by 2 per cent. Among the machinery items, there were increases in value in exports of office machinery (12 per cent), reflecting higher value of shipments to the EEC countries, particularly France, West Germany and Italy, and in telecommunication equipment (9½ per cent) back to the fourth quarter level. Other increases occurred in power generating machinery (3 per cent), general industrial machinery (3½ per cent), metal working machinery (1½ per cent) and other electrical machinery (6½ per cent), but shipments of specialised machinery were 1½ per cent lower. Exports of road vehicles increased by 6 per cent in value to £805 million; included in this rise were increased shipments of motor vehicles and spare parts to West Germany and the Irish Republic. Volume rose sharply – by 13 per cent – having been broadly flat for the last two years. Deliveries of other transport equipment in the second quarter rose by 4 per cent in value to £381 million.

The value of chemical exports rose by 6 per cent to £1,037 million in the second quarter of the year, with volume up by 6½ per cent. However, in both cases deliveries were not much above the peak levels of the third quarter of last year. Within this category, organic chemicals fell by 4 per cent in value but inorganic chemicals rose by 14 per cent, reflecting increased shipments in particular to Italy and the United States. Exports of plastics rose by 6½ per cent in value after a small fall in the previous quarter.

Shipments of metals and miscellaneous metal manufactures increased in value by 3 per cent to £759 million and by 2½ per cent in volume in the second quarter. Iron and steel rose sharply in value, by 11 per cent, but was only at the level of a year earlier, while non-ferrous metals were down by 7½ per cent. Miscellaneous metal manufactures were virtually unchanged. Exports of textiles, at £296 million, were 3½ per cent lower in value than in the previous quarter, with a fall of 5½ per cent in volume. Deliveries rose in value to the EEC but were lower to the Scandinavian countries.

The value of exports of other manufactured goods, which includes precious stones, rose marginally, but volume fell by 8 per cent.

Table 5 **Derivation of visible trade figures**

Seasonally adjusted

£ million

	Exports			Imports				
	Overseas trade statistics basis fob	Valuation and coverage adjustments	Balance of payments basis fob	Overseas trade statistics basis cif	Freight insurance and other valuation adjustments	Coverage adjustments	Balance of payments basis fob	Visible balance
1970	8 170	−49	8 121	9 163	−884	−116	8 163	−42
1971	9 289	−229	9 060	9 980	−979	−202	8 799	+261
1972	9 906	−456	9 450	11 301	−1 012	−117	10 172	−722
1973	12 657	−542	12 115	16 067	−1 326	−243	14 498	−2 383
1974	16 280	−282	16 538	23 492	−1 543	−176	21 773	−5 235
1975	20 111	−648	19 463	24 423	−1 470	−254	22 699	−3 236
1976	26 024	−600	25 424	31 569	−1 926	−630	29 013	−3 589
1977	33 308	−1 126	32 182	36 996	−2 107	−998	33 891	−1 709
1976								
1st qtr	5 784	−130	5 654	6 763	−417	−142	6 204	−550
2nd	6 303	−143	6 160	7 753	−478	−166	7 109	−949
3rd	6 617	−104	6 513	8 208	−513	−50	7 645	−1 132
4th	7 320	−223	7 097	8 845	−518	−272	8 055	−958
1977								
1st qtr	7 716	−204	7 512	9 169	−563	−121	8 485	−973
2nd	8 272	−345	7 927	9 601	−576	−336	8 689	−762
3rd	8 829	−273	8 556	9 239	−511	−203	8 525	+31
4ht	8 491	−304	8 187	8 987	−457	−338	8 192	−5
1978								
1st qtr	8 849	−439	8 410	9 870	−531	−317	9 022	−612
2nd	9 075	−316	8 759	10 183	−543	−746	8 894	−135
Percentage change Q2/Q1	+2½		+4	+3			−1½	

Table 6 **Exports by area (summary)**

Seasonally adjusted values. Overseas trade statistics basis

£ million fob

		Developed countries					Developing countries			
	Total	Total	EEC	Rest of W. Europe	North America	Other	Total	Oil exporting countries	Other	Centrally planned economies
1970	8 170	5 981	2 406	1 373	1 242	961	1 843	472	1 371	308
1971	9 289	6 752	2 722	1 520	1 447	1 064	2 218	585	1 633	285
1972	9 906	7 329	2 999	1 769	1 610	950	2 228	650	1 578	320
1973	12 657	9 572	4 106	2 293	1 954	1 220	2 628	809	1 819	413
1974	16 820	12 563	5 598	2 980	2 285	1 699	3 678	1 231	2 448	518
1975	20 111	14 125	6 490	3 385	2 370	1 880	5 260	2 292	2 968	667
1976	26 024	18 612	9 249	4 298	3 116	1 949	6 630	3 221	3 409	726
1977	33 308	23 689	12 128	5 594	3 863	2 104	8 613	4 368	4 245	910
1976										
1st qtr	5 784	4 073	1 983	908	693	490	1 514	702	812	180
2nd	6 303	4 569	2 261	1 053	776	479	1 582	752	829	183
3rd	6 617	4 762	2 369	1 090	810	492	1 641	800	842	178
4th	7 320	5 208	2 636	1 247	837	488	1 893	967	926	186
1977										
1st qtr	7 716	5 539	2 813	1 300	902	525	1 925	1 026	899	207
2nd	8 272	5 972	3 044	1 446	957	525	2 103	1 074	1 029	245
3rd	8 829	6 290	3 161	1 506	1 083	541	2 213	1 132	1 081	258
4th	8 491	5 888	3 110	1 342	922	513	2 372	1 135	1 236	200
1978										
1st qtr	8 849	6 141	3 245	1 350	997	548	2 382	1 185	1 197	293
2nd	9 075	6 483	3 465	1 388	1 048	583	2 400	1 232	1 167	256
Percentage change Q2/Q1	+2½	+5½	+7	+3	+5	+6½	+1	+4	−2½	−13

Excluding precious stones, value was down by 6½ per cent and volume by 7½ per cent. The value of deliveries of clothing and footwear was little changed compared with the previous quarter. There were increased shipments to the EEC, particularly the Irish Republic, but exports to Scandinavia and Australia were reduced. Deliveries of professional and scientific instruments rose by 7 per cent in value, strengthening the generally rising trend of exports of this commodity over the past year.

Within the broad category of non-manufactured goods, exports of food, beverages and tobacco rose by 4½ per cent to £729 million, but fell 2 per cent in volume – in both cases following sharp rises in the first quarter. Food and live animal exports changed very little from the last quarter: by market, there was a rise in shipments of live animals to Ireland, while elsewhere the Soviet Union had increased cereal deliveries. Beverages and tobacco increased by 13 per cent. Most of our markets received increased deliveries of beverages and tobacco, with the value of exports of whisky to the United States continuing to rise.

Basic material exports rose sharply, by 17 per cent, both in value and in volume. These increases followed falls in deliveries over the last six months, and were spread generally over all our markets.

Fuel exports rose by 14 per cent to £571 million and volume increased by 13 per cent. Deliveries of crude oil to the Netherlands, Norway and the United States accounted for more than a third of the second quarter's crude oil exports.

Table 7 Exports by area (detail)

Seasonally adjusted values. Overseas trade statistics basis

£ million fob

	1977				1978		Percentage change
	Year	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	Q2/Q1
Developed countries	23 689	5 972	6 290	5 888	6 141	6 483	+5½
EEC	12 128	3 044	3 161	3 110	3 245	3 465	+7
Belgium and Luxembourg	1 841	472	460	480	539	570	+5½
Denmark	800	206	206	203	213	207	−3
France	2 162	511	563	590	583	609	+4½
Irish Republic	1 650	384	444	451	455	502	+10
Italy	983	244	239	245	268	273	+2
Netherlands	2 173	613	552	484	497	544	+9½
West Germany	2 518	586	702	658	713	721	+1
Rest of W. Europe	5 594	1 446	1 506	1 342	1 350	1 388	+3
Finland	347	89	92	84	90	87	−3½
Norway	767	157	318	162	168	175	+4½
Spain	471	117	108	127	102	113	+10
Sweden	1 201	311	308	273	278	281	+1
Switzerland	1 437	419	300	363	455	458	+½
North America	3 863	957	1 083	922	997	1 048	+5
United States	3 127	773	891	733	815	859	+5½
Canada	713	178	183	185	177	183	+3½
Other	2 104	525	541	513	548	583	+6½
Australia	761	190	194	181	200	213	+6½
Japan	470	109	121	128	124	126	+2½
New Zealand	289	72	82	65	69	63	−8½
South Africa	584	145	162	136	157	173	+10
Developing countries	8 613	2 103	2 213	2 372	2 382	2 400	+1
Latin America	971	214	301	271	239	235	−1½
Middle East and north Africa	3 863	918	998	1 044	1 057	1 040	−1½
Iran	655	152	151	185	191	187	−2½
Israel	276	63	71	85	64	58	−9½
Saudi Arabia	601	148	152	162	190	186	−2
Rest	3 779	970	914	1 057	1 086	1 125	+3½
Brazil	246	46	69	89	57	61	+8
India	278	70	67	75	86	67	−22
Nigeria	1 079	284	276	283	281	326	+16
Centrally planned economies	910	245	258	200	293	256	−13
Poland	200	52	47	47	61	71	+15
Soviet Union	347	91	124	73	137	104	−24
Total	33 308	8 272	8 829	8 491	8 849	9 075	+2½
of which							
Oil-exporting countries	4 368	1 074	1 132	1 135	1 185	1 232	+4

Imports by area

(tables 13 and 14)

(The comparisons for some of the component series are affected by the inclusion in the second quarter of North Sea oil production installations valued at around £500 million on an overseas trade statistics basis – see note 3.)

In the second quarter of 1978 the value of imports was £10,183 million, seasonally adjusted on an overseas trade statistics basis, 3 per cent more than in the previous quarter.

During this period, deliveries from the developed countries were 10 per cent higher. The value of imports from the EEC, at £4,119 million, rose by 6½ per cent. Among the individual member countries, arrivals from Belgium and Luxembourg and from the Irish Republic were unchanged, while increased arrivals of motor cars contributed to rises of 2 per cent and 1 per cent respectively in arrivals from Italy and France; imports from the Irish Republic and Italy had both increased strongly in the first quarter. Arrivals from West Germany were sharply higher (15 per cent), with increased deliveries of motor cars and agricultural machinery contributing. Imports from Denmark, also high in the previous quarter, rose by 2½ per cent and from the Netherlands by 1½ per cent.

At £2,029 million, imports from the rest of western Europe were 31 per cent higher than in the previous quarter – this increase was

Table 8 Exports by commodity (summary) [1]

Seasonally adjusted values. Overseas trade statistics basis

£ million fob

					Manufactures [2]									
						Machinery and transport equipment [2]								
	Total	Food, beverages and tobacco	Basic materials	Fuels	Total	Total	Machinery	Road vehicles	Other transport equipment [1] [2]	Chemicals	Metals	Textiles	Other manufactures	Miscellaneous
SITC (Rev 2)		0+1	2+4	3	5-8	7	71-77	78	79	5	67-69	65	Rest of 6+8	9
1970	8 170	514	253	210	6 913	3 411	2 236	874	302	775	962	418	1 347	280
1971	9 289	588	263	239	7 936	4 007	2 624	1 036	348	873	1 007	444	1 605	263
1972	9 906	660	302	242	8 418	4 206	2 753	971	482	951	1 018	468	1 775	285
1973	12 657	876	397	374	10 638	4 981	3 270	1 169	542	1 257	1 313	629	2 458	373
1974	16 820	1 063	552	782	13 907	6 322	4 256	1 398	669	2 113	1 718	774	2 980	515
1975	20 111	1 428	530	827	16 655	8 431	5 782	1 854	795	2 145	1 849	729	3 501	672
1976	26 024	1 692	735	1 265	21 616	10 383	6 994	2 377	1 012	3 007	2 362	972	4 892	715
1977	33 308	2 217	895	2 078	27 172	12 680	8 337	2 871	1 473	3 821	2 879	1 193	6 599	945
1976														
1st qtr	5 784	393	150	244	4 809	2 373	1 639	542	192	655	489	209	1 076	175
2nd	6 303	409	174	290	5 262	2 573	1 707	588	278	725	570	231	1 194	171
3rd	6 617	423	190	327	5 525	2 562	1 737	604	221	781	638	252	1 229	184
4th	7 320	469	221	403	6 019	2 874	1 910	644	320	846	665	280	1 393	186
1977														
1st qtr	7 716	494	228	482	6 263	2 863	1 925	669	270	879	699	298	1 543	214
2nd	8 272	539	218	547	6 754	3 105	2 063	723	319	946	751	295	1 693	243
3rd	8 829	591	232	588	7 189	3 394	2 128	736	530	1 029	742	309	1 634	244
4th	8 491	593	218	462	6 966	3 318	2 221	744	354	967	688	292	1 730	244
1978														
1st qtr	8 849	699	208	499	7 178	3 320	2 195	759	366	980	738	307	1 840	232
2nd	9 075	729	243	571	7 344	3 457	2 271	805	381	1 037	759	296	1 849	244
Percentage change Q2/Q1	+2½	+4½	+17	+14	+2½	+4	+3½	+6	+4	+6	+3	−3½	+½	+5

[1] Not seasonally adjusted. [2] Includes North Sea installations.

more than accounted for by the arrival of North Sea installations in May and June. Imports from Sweden increased by 7 per cent, the result of higher deliveries of machinery and transport equipment. A fall in arrivals of precious stones contributed to the 22 per cent decrease in imports from Switzerland. The arrival of major North Sea installations led to the large rise in the value of shipments from Norway; excluding North Sea installations imports were 12 per cent higher. Imports from Finland rose by 2½ per cent.

Table 9 Exports by commodity (detail)

Seasonally adjusted values. Overseas trade statistics basis — £ million fob

	1977				1978		Percentage change
	year	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	Q2/Q1
Food, beverages and tobacco	2 217	539	591	593	699	729	+4½
Food and live animals	1 418	349	368	396	475	477	+½
Beverages and tobacco	799	190	223	197	224	252	+13
Beverages	629	153	179	149	175	199	+13
Basic materials	895	218	232	218	208	243	+17
Crude materials	838	207	214	203	196	231	+18
Textile fibres	269	66	66	65	57	69	+19
Fuels	2 078	547	588	462	499	571	+14
Manufactures	27 172	6 754	7 189	6 966	7 178	7 344	+2½
Machinery and transport equipment	12 680	3 105	3 394	3 318	3 320	3 457	+4
Machinery	8 337	2 063	2 128	2 221	2 195	2 271	+3½
Power generating machinery	1 527	358	409	402	421	433	+3
Specialised machinery	2 037	520	499	550	548	540	−1½
Metal working machinery	325	81	84	84	90	91	+1½
General industrial machinery	1 642	408	411	437	441	457	+3½
Office machinery	761	188	204	191	189	210	+12
Telecommunications equipment etc	713	179	176	198	178	195	+9½
Other electrical machinery	1 332	334	350	340	333	354	+6½
Road vehicles	2 871	723	736	744	759	805	+6
Other transport equipment [1]	1 473	319	530	354	366	381	+4
Chemicals	3 821	946	1 029	967	980	1 037	+6
Organic chemicals	832	195	215	213	224	216	−4
Inorganic chemicals	524	143	159	123	125	142	+14
Medicinal and pharmaceutical products	555	132	149	148	160	163	+2
Plastics	619	158	161	153	151	161	+6½
Metals	2 879	751	742	688	738	759	+3
Iron and steel	1 017	277	261	231	249	276	+11
Non-ferrous metals	818	209	207	188	204	189	−7½
Miscellaneous metal manufactures	1 045	260	262	283	287	288	+½
Textiles	1 193	295	309	292	307	296	−3½
Other	6 595	1 693	1 634	1 730	1 840	1 849	+½
Clothing and footwear	701	171	181	193	189	191	+1
Instruments	925	217	241	250	249	267	+7
Miscellaneous	945	243	244	244	232	244	+5
Total	33 308	8 272	8 829	8 491	8 849	9 075	+2½

[1] Not seasonally adjusted.

Imports from north America rose by 6 per cent in the second quarter to £1,387 million. The growth was attributable to a 7½ per cent rise in arrivals from the United States, with increased deliveries of general industrial machinery, electrical switchgear, ADP machinery and photographic and scientific equipment outweighing falls in shipments of aircraft. Imports from Canada were unchanged.

Imports from the other developed countries fell by 8 per cent, from the high first quarter level, to £668 million. Deliveries from Australia were down by 26 per cent, with lower arrivals of coal contributing. Imports from New Zealand were 17 per cent lower, while imports from Japan remained at around the high level of the previous quarter. Arrivals from South Africa rose by 13 per cent, largely the result of greater shipments of precious stones.

Imports from the developing countries, at £1,780 million, fell by 10 per cent to below the level of the fourth quarter 1977. Within this total, unduly low imports from the oil exporting countries led to a 16 per cent fall, also to below the level of the fourth quarter. Imports from the Middle East and north Africa were 21 per cent lower, largely reflecting reduced crude oil imports from Iran, Saudi Arabia and Kuwait.

Among imports from the rest of the developing countries, which in total fell by 2½ per cent, there was a 73 per cent rise in arrivals from Nigeria, largely the result of greater shipments of crude oil. Imports from the centrally planned economies rose marginally, dispite a 15 per cent fall in arrivals from the Soviet Union.

Imports by commodity

(tables 15 to 19)

Imports of food, beverages and tobacco, at £1,524 million, were little changed in value following the sharp rise in the first quarter but decreased by 3½ per cent in volume. In value terms, arrivals of food and live animals fell by 2

Table 10 Exports by commodity: volume indices

Seasonally adjusted. Overseas trade statistics basis — Indices 1975=100

					Manufactures [1]							
						Machinery and transport equipment [1] [2]						
	Total	Food, beverages and tobacco	Basic materials	Fuels	Total	Total	Machinery	Road vehicles	Chemicals	Metals	Textiles	Other manufactures
SITC (rev 2)		0+1	2+4	3	5-8	7	71-77	78	5	67-69	65	Rest of 6+8
Weights	1 000	71	26	41	828	419	287	92	107	92	36	174
1970	77.9	65	92	110	77	75	73	84	73	97	96	70
1971	84.7	71	93	110	85	83	81	90	80	104	101	80
1972	86.4	74	100	112	86	82	80	81	85	105	107	84
1973	98.5	88	105	117	99	91	89	90	103	120	124	98
1974	102.6	91	110	109	103	95	95	94	122	112	118	104
1975	100.0	100	100	100	100	100	100	100	100	100	100	100
1976	108.7	103	117	120	109	101	99	104	124	109	117	117
1977	119.0	111	125	164	118	105	102	105	141	116	120	135
1976												
1st qtr	105.1	103	108	103	105	100	101	105	116	99	109	112
2nd	108.4	101	115	115	109	103	100	107	125	111	116	116
3rd	108.2	103	116	122	109	97	97	102	127	113	119	116
4th	113.0	107	129	139	112	104	101	103	129	111	122	124
1977												
1st qtr	115.1	108	131	155	113	100	98	103	131	115	124	133
2nd	118.7	109	118	170	118	105	102	106	141	121	120	136
3rd	123.9	114	130	183	123	110	103	105	150	120	122	131
4th	118.1	115	121	149	117	105	104	105	142	109	112	138
1978												
1st qtr	121.8	137	120	174	118	103	100	107	144	115	119	142
2nd	122.3	134	141	196	119	108	102	120	154	118	113	131
Percentage change Q2/Q1	+½	−2	+17	+13	+½	+4½	+2	+13	+6½	+2½	−5½	−8

[1] Includes North Sea installations. [2] Indices for other transport equipment SITC (rev 2) 79 are not separately available.

per cent, with a fall in volume offsetting higher prices. Shipments of dairy produce rose by 21 per cent, mainly reflecting greater volumes. In terms of value, imports of meat rose by 5 per cent, with an increase in both volume and price. Deliveries of cereals and animal feeding stuffs and of fruit and vegetables were little changed. The 16 per cent rise in the value of beverages and tobacco imports was attributable to a further large increase in the quantity of tobacco imported. Fuel deliveries fell by 15 per cent in value to £1,078 million, with an unduly low volume of crude oil imports.

Imports of industrial materials, at £3,542 million, fell by 2 per cent in value and 3½ per cent in volume in both cases following large increases in the previous quarter. Within this group, imports of basic materials fell by 4½ per cent as a result of a fall in the volume of arrivals. There was a fall of 4½ per cent in the value of crude material imports, as volume fell back to the low levels recorded in the second half of last year. Arrivals of timber rose by 11 per cent in value, mainly the result of higher volumes. Imports of metal ores fell by 5½ per cent in value, reflecting a decrease in both volume and price. Imports of pulp and waste

Table 11 Exports: value and volume indices excluding the more erratic items

Seasonally adjusted. Overseas trade statistics basis

			Manufactures					
	Total [1]		Total [1]		Machinery and transport equipment [2]		Other manufactures [3]	
	Value	Volume	Value	Volume	Value	Volume	Value	Volume
	£m	1975=100	£m	1975=100	£m	1975=100	£m	1975=100
1975	18 480	100.0	15 024	100	7 662	100	2 640	100
1976	*23 705*	*108.1*	*19 297*	*108*	*9 407*	*101*	3 549	115
1977	29 852	116.8	23 717	115	11 245	102	4 578	128
1976								
1st qtr	5 321	105.4	4 346	106	2 193	102	793	111
2nd	5 685	107.0	4 644	108	2 309	102	841	111
3rd	*6 087*	*108.6*	*4 996*	*110*	*2 352*	98	909	116
4th	6 612	111.3	5 311	110	2 553	101	1 006	121
1977								
1st qtr	7 008	113.9	5 555	112	2 595	99	1 102	129
2nd	7 356	116.0	5 837	114	2 792	103	1 090	123
3rd	*7 889*	*121.5*	*6 249*	*120*	*2 885*	*104*	1 203	132
4th	7 600	115.9	6 075	115	2 974	104	1 184	129
1978								
1st qtr	7 931	120.1	6 259	116	2 966	102	1 275	136
2nd	8 053	121.3	6 322	117	3 090	107	1 195	125
Percentage change Q2/Q1	+1½	+1	+1	+1	+4	+5	−6½	−7½

[1] As in table 8 but excluding ships, North Sea production installations, aircraft and precious stones. [2] As in table 8 but excluding ships, North Sea production installations and aircraft. [3] *As in table 8 but excluding precious stones.*

Table 12 Exports by commodity: unit value indices

Not seasonally adjusted. Overseas trade statistics basis

Indices 1975=100

					Manufactures							
						Machinery and transport equipment [1]						
	Total	Food, beverages and tobacco	Basic materials	Fuels	Total	Total	Machinery	Road vehicles	Chemicals	Metals	Textiles	*Other* manufactures
SITC (rev 2)		0+1	2+4	3	5-8	7	71-77	78	5	67-69	65	Rest of 6+8
1970	51.1	56	51	23	53	52	52	53	48	52	57	56
1971	54.0	59	53	26	55	56	55	59	50	51	58	58
1972	57.0	63	58	26	58	60	60	62	51	52	58	62
1973	64.1	70	72	38	65	65	64	67	56	60	69	72
1974	81.8	83	93	87	81	79	78	79	81	85	90	82
1975	100.0	100	100	100	100	100	100	100	100	100	100	100
1976	120.8	115	124	126	121	123	123	123	114	119	115	124
1977	142.5	137	144	150	143	149	148	152	128	136	139	142
1976												
1st qtr	110.7	107	107	115	111	113	113	110	106	110	105	113
2nd	117.1	113	119	122	117	119	119	119	109	113	110	121
3rd	124.0	117	132	129	124	126	126	128	116	124	117	127
4th	131.4	125	138	138	132	133	133	136	123	131	127	135
1977												
1st qtr	135.9	130	142	145	136	139	139	142	126	133	133	135
2nd	141.7	138	151	150	142	146	145	150	128	137	137	143
3rd	145.3	142	145	154	145	152	151	156	129	136	142	145
4th	147.2	139	138	150	148	158	156	161	130	137	145	143
1978												
1st qtr	149.5	143	135	141	151	161	159	161	129	142	145	148
2nd	153.7	148	141	141	155	162	162	159	131	145	147	162
Percentage change Q2/Q1	+3	+4	+4½	−½	+3	+1	+1½	−1½	+1	+2	+1	+9½

[1] *Indices for other transport equipment SITC (rev 2) 79 are not separately available.*

Table 13 Imports by area (summary)

Seasonally adjusted values. Overseas trade statistics basis

£ million cif

		Developed countries					Developing countries			
	Total	Total	EEC	Rest of W. Europe	North America	Other	Total	Oil exporting countries	Other	Centrally planned economies
1970	9 163	6 549	2 485	1 323	1 878	864	2 203	833	1 370	389
1971	9 980	7 164	2 985	1 479	1 752	947	2 420	1 069	1 351	376
1972	11 301	8 379	3 586	1 845	1 807	1 142	2 469	1 040	1 429	432
1973	16 067	11 885	5 291	2 735	2 394	1 465	3 563	1 507	2 056	595
1974	23 492	16 241	7 799	3 491	3 269	1 683	6 485	3 815	2 670	744
1975	24 423	17 625	8 876	3 594	3 238	1 917	6 022	3 288	2 734	738
1976	31 569	22 569	11 510	4 645	4 280	2 134	7 860	4 296	3 564	1 109
1977	36 996	27 420	14 161	5 582	4 997	2 680	8 167	3 804	4 362	1 357
1976										
1st qtr	6 763	4 788	2 458	1 001	877	451	1 682	924	759	254
2nd	7 753	5 633	2 953	1 116	1 060	503	1 883	999	884	301
3rd	8 208	5 780	2 835	1 247	1 134	564	2 100	1 177	923	270
4th	8 845	6 369	3 264	1 280	1 209	616	2 195	1 196	999	284
1977										
1st qtr	9 169	6 608	3 380	1 300	1 259	668	2 157	1 032	1 125	302
2nd	9 601	7 212	3 551	1 647	1 309	705	2 117	1 030	1 087	342
3rd	9 239	6 767	3 601	1 218	1 328	620	2 065	924	1 141	371
4th	8 987	6 833	3 629	1 416	1 101	687	1 828	819	1 009	342
1978										
1st qtr	9 870	7 463	3 874	1 553	1 307	728	1 975	925	1 050	310
2nd	10 183	8 203	4 119	2 029	1 387	668	1 780	779	1 002	313
Percentage change Q2/Q1	+3	+10	+6½	+31	+6	−8	−10	−16	−4½	+1

paper and of textile fibres were little changed. Deliveries of chemicals continued at a high level, with an increase of 3 per cent in value and 3 per cent in volume between the quarters. Arrivals of inorganic chemicals rose in value by 16 per cent reflecting a large increase in volume. In terms of value, deliveries of organic chemicals and plastics were little changed. Imports of medicinal and pharmaceutical products rose in value by 10 per cent. Imports of other semi-manufactures fell in value by 2½ per cent, with a 4½ per cent decrease in volume from comparatively high first quarter levels.

Deliveries of iron and steel and of paper and paperboard rose in value by 11 per cent and 6 per cent, respectively, both reflecting increases in volume and price. In terms of value there were rises of 6½ per cent in deliveries of wood and cork manufactures (higher volumes) and textiles (higher prices). Imports of non-metallic mineral manufactures fell by 12 per cent in value reflecting a fall in arrivals of precious stones.

Imports of finished manufactures, at £3,950 million, increased by 21 per cent in value and 15 per cent in volume; excluding the more erratic items the increases were 7½ per cent and 4 per cent respectively following marked increases in the first quarter. Imports of road vehicles rose in value by 6 per cent with volume increasing by 1½ per cent and prices sharply higher. Arrivals of machinery rose by 9 per cent in value with a further large increase – of 7½ per cent – in volume after the broadly flat path of 1977. Imports of metal working machinery were up by 22 per cent in value, whilst deliveries of general industrial machinery and specialised machinery rose in value by 9½ per cent and 8½ per cent, respectively. The value of telecommunication equipment imports increased by 8½ per cent and those of office machinery by 7 per cent; in both cases higher volumes outweighed falls in prices. Within the value increase of 7 per cent of other finished manufactures, deliveries of instruments rose by 14 per cent.

Notes

Statistical changes: Some changes have been made to the methodology for compiling the index numbers:

1 *The volume and unit value index numbers have now been* computed with 1975 weights back to 1973 in order to meet the guidelines for re-basing the national income accounts. Previously, 1975 weights had been used from 1975 onwards only. This affects the growth rates of the index numbers between the years 1973 to 1975. Between 1970 and 1973 the series continue to reflect the use of 1970 weights.

2 The quarterly unit value indices are now centred to the annual index numbers.

3 Some changes have been made to the definition of blocks within SITC (rev 2) sections 7 and 8 – the block is the level at which pricing assumptions are made for the non-sampled headings – in order to facilitate the computation of figures according to the United Nations classification by broad economic category. As a result some minor revisions have been made to the index numbers for finished manufactures. Index numbers on this new classification for both exports and imports will be available shortly, and will probably be published in an article in *Trade and Industry* later this year.

Revisions: The figures in this article are consistent with those published on Friday, 1 September in the Pink Book, 'United Kingdom Balance of Payments 1967-77'. They include certain revisions to the balance of payments adjustments.

1 Customs uplift: This adjustment was amended in February 1978 in the light of provisional analyses of the results of a survey, relating to March 1977, carried out by Customs Statistical Office into the extent of 'Customs uplift' included in the overseas trade statistics. Now that the full analyses of that survey are available some further changes, which reduce imports, have been made to this adjustment for the years from 1975.

2 Port charges: *Mistakenly, hitherto, a deduction has been* made to the import figures for port charges on the assumption that those paid by the importer were included in the cif valuation *and those paid by the shipowner were not included in the freight* adjustment. It is now evident that charges paid by the importer do not appear in the cif valuation, while those paid by the *shipowner are included in the freight costs and are therefore* removed in the freight adjustment. This revision, which has the effect of increasing imports, has been made back to 1963.

Table 14 Imports by area (detail)

Seasonally adjusted values. Overseas trade statistics basis *£ million cif*

	1977				1978		Percentage change
	Year	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	Q2/Q1
Developed countries	27 420	7 212	6 767	6 823	7 463	8 203	+10
EEC	14 161	3 551	3 601	3 629	3 874	4 119	+6½
Belgium and Luxembourg	1 686	429	420	438	452	452	—
Denmark	816	210	205	199	243	249	+2½
France	2 689	651	726	720	721	730	+1
Irish Republic	1 295	312	351	321	396	395	—
Italy	1 543	385	395	407	455	463	+2
Netherlands	2 530	645	592	610	622	630	+1½
West Germany	3 602	859	947	959	994	1 139	+15
Rest of W. Europe	5 582	1 647	1 218	1 416	1 553	2 029	+31
Finland	595	159	144	142	151	155	+2½
Norway [1]	853	405	140	171	222	752	+239
Sweden	1 270	317	310	322	320	341	+7
Switzerland	1 333	382	277	381	550	427	−22
North America	4 997	1 309	1 328	1 101	1 307	1 387	+6
United States	3 729	1 007	991	809	1 015	1 091	+7½
Canada	1 230	294	322	282	287	287	—
Other	2 680	705	620	687	728	668	−8
Australia	346	95	83	74	97	71	−26
Japan	1 065	275	267	262	319	321	+½
New Zealand	384	91	100	96	107	89	−17
South Africa	885	259	177	249	186	210	+13
Developing countries	8 167	2 117	2 065	1 828	1 975	1 780	−10
Latin America	769	192	186	175	178	202	+14
Middle East and north Africa	3 942	1 077	964	864	962	762	−21
Iran	792	211	146	157	182	101	−45
Kuwait	555	157	146	106	214	143	−33
Saudi Arabia	1 133	317	271	271	250	155	−38
Rest	3 456	848	915	788	835	816	−2½
Nigeria	237	46	56	45	62	107	+73
Centrally planned economies	1 357	342	371	342	310	313	+1
Soviet Union	781	193	228	174	171	146	−15
Total	*36 996*	*9 601*	*9 239*	*8 987*	*9 870*	*10 183*	*+3*
of which							
Oil exporting countries	3 804	1 030	924	819	925	779	−16

[1] From January 1978, continental shelf (foreign part) previously included in rest of western Europe has been re-allocated to the appropriate parent country in the Overseas Trade Statistics. It has not been possible to compile figures on this new basis for earlier *periods. While any discontinuity at the level of the broad area groups is likely to be comparatively small, at the country level it has a* greater effect and is the main explanation of the sharp rise in imports from Norway in the first quarter of 1978.

Table 15 Imports by commodity (summary)

Seasonally adjusted values. Overseas trade statistics basis £ million cif

				Industrial materials				Finished manufactures [1]						
									Machinery and transport equipment [1]					
	Total	Food, beverages and tobacco	Fuels	Total	Basic materials	Chemicals	Other semi-manufactures	Total	Total	Machinery	Road vehicles	Other transport equipment [1] [2]	Other	Miscellaneous
SITC (rev 2)		0+1	3	2, 4, 5, 6	2+4	5	6	7+8	7	71-77	78	79	8	9
1970	9 163	2 047	950	3 859	1 362	533	1 964	2 175	1 599	1 192	174	233	576	131
1971	9 980	2 176	1 253	3 840	1 278	549	2 013	2 558	1 860	1 274	283	303	698	153
1972	11 301	2 356	1 247	4 286	1 330	631	2 325	3 267	2 399	1 586	498	316	868	145
1973	16 067	3 094	1 733	6 235	1 977	862	3 396	4 798	3 506	2 414	668	424	1 291	208
1974	23 492	3 762	4 644	8 909	2 583	1 523	4 803	5 749	4 141	3 002	669	471	1 608	428
1975	24 423	4 335	4 316	8 331	2 233	1 350	4 748	6 906	5 042	3 338	910	794	1 864	535
1976	31 569	4 983	5 669	11 245	3 248	1 924	6 073	9 225	6 755	4 305	1 432	1 019	2 470	447
1977	36 996	5 945	5 252	13 491	3 612	2 365	7 513	11 803	8 780	5 298	2 133	1 349	3 023	505
1976														
1st qtr	6 763	1 081	1 282	2 409	678	413	1 319	1 855	1 310	899	271	141	544	103
2nd	7 763	1 081	1 381	2 706	768	472	1 466	2 336	1 745	1 026	333	386	591	117
3rd	8 208	1 261	1 491	2 910	872	497	1 541	2 390	1 754	1 122	391	240	636	117
4th	8 845	1 396	1 514	3 221	930	543	1 747	2 645	1 946	1 257	437	251	699	110
1977														
1st qtr	9 169	1 502	1 375	3 358	981	604	1 773	2 739	1 995	1 285	485	225	744	119
2nd	9 601	1 561	1 377	3 462	888	593	1 981	3 086	2 346	1 297	496	553	741	122
3rd	9 239	1 547	1 278	3 324	897	599	1 828	2 964	2 204	1 369	555	280	760	141
4th	8 987	1 336	1 223	3 346	847	569	1 931	3 014	2 236	1 347	598	291	778	123
1978														
1st qtr	9 870	1 521	1 267	3 606	845	653	2 108	3 268	2 416	1 442	669	305	852	119
2nd	10 183	1 524	1 078	3 542	809	673	2 060	3 950	3 042	1 569	710	762	908	133
Percentage change Q2/Q1	+3	—	−15	−2	−4½	+3	−2½	+21	+26	+9	+6	+150	+6½	+12

[1]Includes North Sea installations. [2] Not seasonally adjusted.

Pye's LDK 65 telecine system ordered Cempae, the Mexican government's educational television network.

3 North Sea installations: The figures from 1975 have been revised in the light of later information from oil companies.

The impact of these and other revisions on the figures for recent years is to increase the visible deficit by £31 million in 1975, £79 million in 1976 and £97 million in 1977. In the first quarter of 1978 the visible deficit is increased by £38 million.

Treatment of oil platforms in the second quarter import figures: The import figures for the second quarter include two oil platforms valued, on an overseas trade statistics basis, at around £500 million. The two platforms had been moved to Norway in July last year for completion. As there was no effective change in ownership, the import figures on a balance of payments basis include only the value of additional foreign goods (amounting to about £75 million) used in completing the platforms. This mirrors the treatment adopted for exports last July when the value of the platforms was included in the figures on an overseas trade statistics basis but excluded on a balance of payments basis.

During the completion process, expenditure was incurred for services (the value of contracts for finishing the platform other than the supply of major items of equipment) and the estimates of net invisible earnings in recent quarters incorporate appropriate debits.

Figures for 1977: The figures for 1977 on an overseas trade statistics basis included in the tables do not yet incorporate the latest information recently published by Customs and Excise in 'Overseas Trade Statistics of the United Kingdom, 1977'. The differences, however, are comparatively small. At the level of total trade, a balance of payments adjustment has been incorporated to reflect the later 1977 figures.

Notes: Standard notes on definitions and coverage of the figures were published in *Trade and Industry*, 17 February.

Inquiries: Economics and Statistics Division 5A, Room 234, Department of Industry, 1 Victoria Street, London SW1H 0ET, tel. 01-215 5703/3385.

Table 16 Imports by commodity (detail)

Seasonally adjusted values. Overseas trade statistics basis

£ million cif

	1977				1978		Percentage change
	Year	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	Q2/Q1
Food, beverages and tobacco	5 945	1 561	1 547	1 336	1 521	1 524	—
Food and live animals	5 383	1 423	1 391	1 207	1 347	1 322	−2
Meat and meat preparations	974	246	256	220	266	280	+5
Dairy produce and eggs	460	130	102	137	135	163	+21
Cereals and animal feeding-stuff	1 031	283	268	215	213	215	+1
Fruit and vegetables	1 114	287	270	269	259	257	−1
Other food and live animals	1 804	502	487	361	461	443	−4
Beverages and tobacco	562	138	156	129	174	201	+16
Beverages	306	76	78	76	85	82	−4½
Tobacco	256	58	79	50	95	115	+20
Fuels	5 252	1 377	1 278	1 223	1 267	1 078	−15
Industrial materials	13 491	3 462	3 324	3 346	3 606	3 542	−2
Basic materials	3 612	888	897	847	845	809	−4½
Crude materials	3 330	826	822	775	787	751	−4½
Wood, lumber and cork	633	164	151	153	141	157	+11
Pulp and waste paper	440	116	108	94	86	85	−1
Textile fibres	462	111	101	119	122	122	–
Metal ores	753	182	207	154	165	156	−5½
Chemicals	2 365	593	599	569	653	673	+3
Organic chemicals	702	162	185	171	195	194	−½
Inorganic chemicals	332	75	91	82	89	103	+16
Medicinal and pharmaceutical products	174	47	43	40	45	49	+10
Plastics	545	135	130	137	157	154	−1½
Other semi-manufactures	7 513	1 981	1 828	1 931	2 108	2 060	−2½
Wood and cork manufactures	311	75	74	73	90	96	+6½
Paper and paperboard	975	247	246	234	254	269	+6
Textiles	1 131	279	280	291	334	357	+6½
Non-metallic mineral manufactures	2 111	620	475	604	635	560	−12
Iron and steel	986	253	264	248	250	277	+11
Non-ferrous metals	1 130	286	262	274	282	273	−3
Miscellaneous metal manufactures	534	129	142	136	155	156	+½
Finished manufactures	11 803	3 086	2 964	3 014	3 268	3 950	+21
Machinery	5 298	1 297	1 369	1 347	1 442	1 569	+9
Power generating machinery	691	171	177	169	194	204	+5½
Specialised machinery	882	202	237	218	250	271	+8½
Metal working machinery	224	58	55	59	68	83	+22
General industrial machinery	995	247	256	262	275	300	+9½
Office machinery	912	217	242	231	252	270	+7
Telecommunications equipment etc	544	134	142	132	130	141	+8½
Other electrical machinery	1 050	264	272	264	277	297	+7½
Road vehicles	2 133	496	555	598	669	710	+6
Other transport equipment [1]	1 349	553	280	291	305	762	+150
Other finished manufactures	3 023	741	760	778	852	908	+7
Clothing and footwear	982	236	246	250	259	263	+1½
Instruments	840	206	221	214	239	273	+14
Miscellaneous	505	122	141	123	119	133	+12
Total	36 996	9 601	9 239	8 987	9 870	10 183	+3

[1] Not seasonally adjusted.

Table 17 Imports by commodity: volume indices

Seasonally adjusted values. Overseas trade statistics basis

Indices 1975=100

				Industrial materials				Finished manufactures [1]				
									Machinery and transport equipment [2]			
	Total	Food beverages and tobacco	Fuels	Total	Basic materials	Chemicals	Other semi-manufactures	Total	Total	Machinery	Road vehicles	Other
SITC (rev 2)		0+1	3	2, 4, 5, 6	2+4	5	6	7+8	7	71-77	78	8
Weights	1 000	177	177	341	92	55	194	283	207	137	37	76
1970	82.8	101	117	89	128	83	73	56	56	61	39	53
1971	87.1	100	128	89	117	85	78	64	65	65	58	63
1972	95.8	102	127	97	119	97	87	80	81	83	90	75
1973	109.1	103	131	111	134	114	100	100	103	107	105	95
1974	109.3	100	123	114	120	123	109	102	104	115	90	99
1975	100.0	100	100	100	100	100	100	100	100	100	100	100
1976	106.4	102	100	112	119	122	106	109	108	104	127	110
1977	108.9	102	83	116	113	133	113	123	125	117	160	118
1976												
1st qtr	101.1	95	100	109	115	116	105	97	93	96	104	108
2nd	107.3	101	101	111	117	121	106	114	116	103	122	109
3rd	108.1	102	102	113	124	123	105	111	110	106	140	112
4th	109.0	108	98	115	120	126	109	114	115	113	140	112
1977												
1st qtr	109.6	106	87	117	122	137	109	118	117	116	148	120
2nd	112.2	107	85	117	109	134	116	130	134	116	150	118
3rd	108.0	105	80	114	111	135	110	123	125	120	168	116
4th	105.6	92	78	117	109	128	117	123	125	116	177	118
1978												
1st qtr	116.4	101	85	128	116	153	126	132	132	126	174	133
2nd	116.2	98	71	124	111	157	120	152	159	135	177	135
Percentage change Q2/Q1	—	−3½	−17	−3½	−5	+3	−4½	+15	+21	+7½	+1½	+1

[1] Includes North Sea installations. [2] Indices for other transport equipment SITC (rev 2) 79 are not separately available.

Table 18 **Imports: value and volume indices excluding the more erratic items**

Seasonally adjusted. Overseas trade statistics basis

	Total [1]		Industrial materials				Finished manufactures			
			Total [2]		Other semi-manufactures [2]		Total [3]		Machinery and transport equipment [3]	
	Value £ million	Volume 1975 = 100	Value £ million	Volume 1975 = 100	Value £ million	Volume 1975 = 100	Value £ million	Volume 1975 = 100	Value £ million	Volume 1975 = 100
1975	22 735	100.0	7 432	100	3 849	100	6 118	100	4 254	100
1976	29 399	106.7	10 081	114	4 909	108	8 219	110	5 748	109
1977	33 818	107.6	11 644	114	5 666	109	10 471	124	7 449	126
1976										
1st qtr	6 371	102.4	2 155	110	1 065	106	1 716	101	1 172	98
2nd	7 062	105.2	2 399	112	1 160	105	1 951	108	1 361	107
3rd	7 711	109.4	2 649	116	1 280	109	2 154	113	1 518	113
4th	8 255	109.7	2 879	116	1 405	110	2 397	117	1 698	119
1977										
1st qtr	8 624	111.0	3 034	119	1 450	112	2 518	122	1 773	123
2nd	8 443	107.1	2 856	111	1 375	104	2 534	121	1 794	123
3rd	8 593	108.6	2 951	116	1 455	112	2 691	126	1 931	130
4th	8 158	103.8	2 803	112	1 387	108	2 728	126	1 951	130
1978										
1st qtr	9 030	115.7	3 062	126	1 564	122	2 972	135	2 120	136
2nd	8 898	111.1	3 014	122	1 532	117	3 194	141	2 285	144
Percentage change Q2/Q1	−1½	−4	−1½	−3	−2	−4½	+7½	+4	+8	+5½

[1] As in table 15 but excluding ships, North Sea production installations, aircraft and precious stones. [2] As in table 15 but excluding precious stones. [3] As in table 15 but excluding ships, North Sea production installations and aircraft.

Table 19 **Imports by commodity: unit value indices**

Seasonally adjusted values. Overseas trade statistics basis

Indices 1975 = 100

				Industrial materials				Finished manufactures				
									Machinery and transport equipment [1]			
	Total	Food, beverages and tobacco	Fuels	Total	Basic materials	Chemicals	Other semi-manu-factures	Total	Total	Machinery	Road vehicles	Other
SITC (rev 2)		0 + 1	3	2, 4, 5, 6	2 + 4	5	6	7 + 8	7	71-77	78	8
1970	43.9	45	19	51	47	45	55	53	53	54	50	54
1971	46.0	48	24	50	48	46	53	56	56	56	54	55
1972	48.1	51	24	52	50	47	54	60	60	59	62	59
1973	60.9	67	31	66	66	56	70	69	68	68	71	70
1974	87.9	87	87	94	97	91	94	81	80	79	83	85
1975	100.0	100	100	100	100	100	100	100	100	100	100	100
1976	122.4	113	131	121	123	120	121	125	127	127	128	121
1977	141.5	132	148	141	145	140	140	144	146	144	155	131
1976												
1st qtr	110.4	105	119	107	107	108	107	113	115	115	116	110
2nd	119.2	112	127	117	118	117	117	122	124	124	125	116
3rd	125.6	114	135	125	128	123	124	128	130	131	129	123
4th	134.4	120	143	136	141	131	135	138	138	138	141	135
1977												
1st qtr	138.1	126	147	140	146	134	138	140	141	140	149	135
2nd	141.7	131	149	144	148	140	143	142	144	142	152	138
3rd	143.6	135	149	143	148	143	141	146	148	146	155	143
4th	142.6	137	146	139	139	143	138	148	151	147	161	142
1978												
1st qtr	141.6	139	138	138	131	142	140	150	154	148	172	141
2nd	146.1	142	141	143	133	145	147	156	158	150	185	149
Percentage change Q2/Q1	+3	+2½	+2½	+3½	+1½	+2½	+4½	+4	+3	+1	+7	+6½

[1] Indices for other transport equipment SITC (rev 2) 79 are not separately available.

What is Financial Statistics?

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Financial Statistics is the prime source of UK detailed quarterly *financial accounts.* These include all recorded financial flows between sectors of the economy and bring a sense of proportion to the statistics of the different types of financial institutions and the various savings media.

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Price £3.20 (by post £3.52). Annual subscription £43.91 including postage. From HMSO, PO Box 569, London SE1 9NH.

Record level of tourists to UK in 1977

In 1977 there were almost 11.5 million (11 490 000) overseas visitors to the UK, an increase of 14 per cent on 1976. This record level, coinciding with the silver jubilee celebrations, resulted in 1977 being the first year in which the number of overseas visitors to the UK exceeded the number of UK residents going abroad. The upward trend in spending by overseas visitors in the UK continued. The total expenditure in 1977 by all visitors was £2,179 million compared with £1,633 million in 1976, an increase of 33 per cent.

The number of visits abroad by residents of the UK in 1977 was 11 129 000 compared with 11 079 000 in 1976, an increase of just under one-half per cent. The total expenditure abroad on these visits in 1977 was £1,102 million compared with £1,006 million in 1976, an increase of 10 per cent.

The positive balance on the travel account for the year, passed the billion pound level (£1,077 million), 72 per cent more than the previous record surplus of £627 million achieved in 1976.

The estimates and tables in this article are based mainly on the international passenger survey, a survey of passengers entering and leaving the UK, a description of which is given at the end of this article. Results are also published quarterly in the Business Monitor M 6, Overseas travel and tourism.[1]

Overseas visitors to the United Kingdom 1977

Visits and expenditure (tables 1 and 2)
The large increase in earnings in 1977, following the pattern of the previous year, was due to an increase in average expenditure per visit of 17 per cent, combined with a 14 per cent increase in the number of visits.

The number of visits from the United States in 1977 increased by 13 per cent compared with 1976, to 1 686 000. Visits from the EEC countries increased by 14 per cent, the largest increases being in visits from Federal Republic of Germany (25 per cent), France (13 per cent) and Netherlands (11 per cent).

The number of visits from the rest of western Europe rose by 17 per cent, a greater increase than those from the EEC. The largest increases were from Austria (29 per cent), Greece (26 per cent), and from Norway, Sweden and Finland (20 per cent).

Visits from all other areas rose by 10 per cent in 1977. Those from the Middle East showed an increase of 35 per cent, and from Australia and New Zealand 7 per cent, but there was a decline of 7 per cent in visits from the Commonwealth Caribbean.

Visitors from EEC countries, for the third successive year, accounted for 28 per cent of the total (£2,179.1 million) of foreign source money spent in the UK in 1977. Visitors from the rest of western Europe contributed 14 per cent, north America 21 per cent, the Middle East 14 per cent and Australia and New Zealand 7 per cent. This expenditure includes the cost of accommodation, meals, and fares spent travelling within this country, as well as purchases of goods for personal use or gifts, and service expenses such as courses of study provided that the money was from a foreign source. It excludes expenditure on large items not taken out by the visitors as personal baggage when they leave the country which are included in the UK trade statistics; in particular for 1977 personal exports of cars amounted to approximately £34 million.

Also excluded are fares paid by overseas visitors to UK air and sea carriers (estimated at £584 million in 1977) and their expenditure on board.

Length of stay and average expenditure per visit (table 3)
The average length of stay of overseas visitors to the UK was 12.2 nights, continuing the steady decline apparent since 1964 when the average was 19.8. For visits from EEC countries the average length of stay remained 8.7 nights as in 1976, but a decline was apparent for visits from the rest of western Europe (11.2 nights compared with 12.2 in 1976), north America (12.2 from 12.6), and other countries (22.9 from 23.1).

The average length of stay for holiday visits declined to 10.8 nights in 1977 from 11.1 in 1976, but for business visits it rose slightly to 7.0 nights from 6.9. Both visits to friends and relatives, and those for other purposes showed decreases in length of stay, from 18.0 in 1976 to 17.7, and from 16.5 to 15.9 respectively.

The average daily expenditure on visits to the UK, however, increased to £15.4 in 1977 from £12.9 in 1976. Thus despite the fall in length of stay, there was an increase also in the average expenditure per visit of 17 per cent from £160.3 in 1976 to £187.4 in 1977. The average for visits from EEC countries showed an increase of 16 per cent in 1977 to £107.8, the rest of western Europe 6 per cent to £185.3, north America 12 per cent to £205.1 and from other countries 26 per cent to £397.6.

Purpose of visit (table 4)
Forty-nine per cent of overseas visitors to the UK in 1977 came for a holiday, 18 per cent came for business, 16 per cent to visit friends and relatives, with the remaining 17 per cent coming for miscellaneous reasons including study, shopping, sport, overnight transfers and visits for more than one purpose where none predominated. These proportions remain virtually unchanged from 1976.

The expenditure in 1977 of £2,179 million by overseas visitors, included £1,010 million (46 per cent) on holidays, £457 million (21 per cent) on business visits, £324 million (15 per cent) on visits to friends and relatives, and £362 million (17 per cent) for miscellaneous purposes. Expenditure in the Channel Islands, included in the above total, amounted to a total of £26 million, an increase of 43 per cent on the figure for 1976.

Inclusive tours
Thirty-three per cent of all holiday visitors (excluding visitors from the Irish Republic) came to the UK on inclusive tour holidays in 1977, this being slightly higher than the 30 per cent in 1976. In contrast, 58 per cent of UK holiday trips abroad were inclusive tours.

Table 1 Numbers of visits, earnings and expenditure, 1969-77

	Visits				Earnings		Expenditure		Balance
	To the UK by overseas visitors		Overseas by UK residents						
	Thous.	% increase on previous year	Thous.	% increase on previous year	£m	% increase on previous year	£m	% increase on previous year	£m
1969	5 821	20.6	8 083	11.2	359	27.2	324	19.8	35
1970	6 692	15.0	8 482	4.9	432	20.3	382	17.8	50
1971	6 973	4.2	9 426	11.1	486	12.5	439	14.9	47
1972	7 167	2.8	10 553	12.0	546	12.3	527	19.9	19
1973	7 724	7.8	11 522	9.2	681	24.7	682	29.4	−1
1974	7 953	3.0	10 489	−9.0	837	22.9	683	0.2	154
1975	8 844	11.2	11 607	10.7	1 123	32.6	878	28.0	245
1976 r	10 071	13.9	11 079	−4.5	1 633	45.4	1 006	14.7	627
1977 p	11 490	14.1	11 129	0.5	2 179	33.5	1 102	9.5	1 077

Estimates from 1975 include figures supplied by the Economic Advisers Office of the State of Jersey. Information prior to 1975 is not available and no Channel Islands data is included in respect of numbers of visits and length of stay. The percentage increases in table 1 for 1975 are based on figures which exclude the Channel Islands. p Provisional. r Revised.

Table 2 Overseas visits to the United Kingdom: numbers of visits and expenditure by country of permanent residence, 1976-77

Country of permanent residence	Numbers of visits (thousands)		Expenditure (£ million)	
	1976 r	1977 p	1976 r	1977 p
Belgium/Luxembourg	683	753	52.4	68.7
Netherlands	832	920	90.8	110.9
France	1 171	1 324	89.1	120.2
Federal Republic of Germany	1 104	1 379	111.0	162.3
Denmark	193	207	23.4	30.8
Italy	281	307	34.7	48.6
Republic of Ireland	703	733	59.0	69.7
EEC	4 967	5 673	460.4	611.3
Norway/Sweden/Finland	574	691	90.5	117.2
Switzerland	249	296	37.7	56.2
Austria	84	108	10.6	13.9
Spain	254	267	47.4	50.8
Portugal	47	49	6.5	6.4
Greece	61	77	17.1	24.9
Other western Europe	115	133	32.2	31.0
Western Europe (non-EEC)	1 385	1 622	242.0	300.4
USA .	1 490	1 686	267.7	347.0
Canada	477	528	91.4	107.3
North America	1 967	2 215	359.2	454.2
Eastern Europe	58	56	6.7	7.0
Australia	352	380	98.5	126.7
New Zealand	60	62	16.0	19.7
South Africa	130	135	28.9	41.3
Commonwealth Caribbean	43	40	10.4	11.9
Latin America	156	160	39.2	42.7
Japan	119	125	19.9	26.8
Middle East	365	494	192.8	312.8
North Africa	84	108	27.9	49.7
Rest of Africa	200	213	70.0	88.5
Rest of world	184	208	42.9	60.2
Other countries	1 752	1 931	553.1	787.4
Total all countries	10 071	11 490	1 632.8 [1]	2 179.1 [1]

[1] Including earnings in respect of Channel Islands, not allocated to area. p Provisional. r Revised.

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[1] Figures for 1976 include revisions to those relating to the Irish Republic. These figures are also included in Business Monitor M 6, Overseas travel and tourism 4th quarter 1977 (obtainable from HMSO, PO Box 569, London SE1 9NH, quarterly reports £1.56 per annum, annual supplement cost to be announced). Figures for 1977 relating to the Irish Republic are provisional and estimated only.

The proportion of holiday visitors from north America on inclusive tours increased marginally to 31 per cent. The proportion of inclusive tour visitors from the EEC and the rest of western Europe continued to rise, from 35 per cent of holiday visitors in 1976 to 39 per cent in 1977, the proportion from non-EEC countries being 57 per cent.

Method of travel

During 1977, 59 per cent of overseas visitors left the UK by air, the same percentage as in 1976. Travel by sea remained at the same level of 39 per cent as in 1976, with travel across the Irish border accounting for the remaining traffic. The proportion of north American visitors leaving by air in 1977 was 82 per cent, slightly higher than in 1976, and of all western European visitors 46 per cent, slightly lower than in 1976.

It should be noted that visitors by sea include all of those travelling across the English Channel and North Sea; these will include a proportion of visitors who arrive in Europe by air from long haul airports and continue to the UK by sea.

Seasonal pattern (table 8)

The proportion of visitors to the UK in each quarter of 1977 followed closely the pattern shown in previous years, with 39 per cent of visits being in the third quarter. Forty-four per cent of holiday visits occurred in the third quarter of the year, marginally lower than in 1976. Business visits continued to show the more even seasonal spread apparent in past years, and miscellaneous visits and those to friends and relatives continued to have the highest proportion of visits occurring in the third quarter (41 per cent and 37 per cent respectively).

Visits abroad by UK residents in 1977

Visits and expenditure (table 1)

Visits abroad in 1977 by UK residents rose by just under one-half per cent compared with 1976, and expenditure increased by 10 per cent. However, although there was this small rise in the number of visits compared with the fall in the previous year, the increase in expenditure was the lowest since the depressed level of 1974. The £1,102 million spent abroad in 1977 included an estimated £9 million for rail transport abroad on journeys to and from foreign destinations. The amount spent abroad does not include fares paid in the UK, by United Kingdom residents, to foreign air and sea carriers for journeys directly to and from the UK, which are estimated at £385 million.

Countries visited (table 2)

Visits to EEC countries in 1977 accounted for 53 per cent of all visits, 1 per cent more than in 1976. Those to other western European countries accounted for 32 per cent of all visits, 2 per cent less than in 1976. The proportion of visits to non-European countries remained the same as 1976, accounting for 13 per cent of the total number. Among EEC countries in 1977 there were small increases in the number of visits to Federal Republic of Germany, France and Denmark, of 8 per cent, 4 per cent, and 2 per cent respectively. However there was a decrease in visits to Netherlands (13 per cent), Belgium and Luxembourg (7 per cent) and Italy (6 per cent). All other western European countries showed a decline in the number of visits, except Portugal which showed an increase of 95 per cent, although the numbers involved were relatively small. Visits to the United States were 7 per cent higher than in 1976, but those to Canada rose by only 1 per cent. Visits to the Middle East rose by 29 per cent compared with 1976, of which business visits continued to account for the largest proportion (49 per cent).

Length of stay and average expenditure per visit (table 6)

The average length of stay for visits abroad by UK residents in 1977 was 13.3 days compared with 13.6 in 1976, and the lowest average figure yet recorded. The rise in the average expenditure per visit continued in 1977 with an increase of 9 per cent compared with 1976. Average expenditure on visits to EEC countries rose by 7 per cent and on those to other west European countries by 9 per cent. The average expenditure on visits to north America in 1977 increased by 8 per cent to £192 million. Average daily expenditure was once again the highest on visits to non-EEC western European countries, being £8, but for all areas the figures continued to be only approximately half those for visits to the United Kingdom.

Purpose of visit (table 7)

In 1977 59 per cent of UK residents going abroad went for a holiday, compared with 61 per cent in 1976. Eighteen per cent went for business reasons, as in 1976, and 18 per cent for visiting friends and relatives compared with 17 per cent in the previous year. The remaining proportion, going for miscellaneous purposes, continued to be 5 per cent.

Holiday visits accounted for 48 per cent of all visits to EEC countries. a decrease of 2 per cent on the 1976 figure. To other western European countries they accounted for 84 per cent, also a slight decrease on 1976. While holiday visits represented 30 per cent of all visits to north America, visits to friends and relatives accounted for 43 per cent. Holiday visits amounting to 38 per cent, were the highest proportion of visits to other countries, with business visits, and those to friends and relatives amounting to 30 per cent and 29 per cent respectively.

Inclusive tours

In 1977 the proportion of UK holidaymakers going abroad on inclusive tours was 58 per cent (excluding visits to the Irish Republic), marginally lower than in 1976.

Of all inclusive tours, 23 per cent were to EEC countries, 68 per cent to other western European countries, 5 per cent to other areas and 4 per cent on cruises. These proportions remain practically unchanged since 1973.

Spain continued to be the predominant des-

Table 3 **Overseas visitors: average length of stay in the United Kingdom and average expenditure per day and per visit, by area of permanent residence and by purpose of visit, 1970-77**

		Analysis by area of permanent residence				Analysis by purpose of visit			
	Total[1]	Western Europe EEC countries[2]	Western Europe non-EEC countries	North America	Other countries	Holiday	Business	Visiting friends and relatives	Miscellaneous
Average length of stay (days)									
1970	15.0	13.2		12.2	28.7	11.9	7.1	18.6	27.1
1971	14.7	12.5		12.5	27.8	12.0	7.2	18.5	30.0
1972	14.6	10.6	16.9	12.7	28.1	11.9	7.0	18.5	29.6
1973	14.2	10.3	16.1	12.9	26.9	12.1	7.7	18.9	24.9
1974	13.9	9.9	15.8	13.4	24.8	12.0	7.2	18.3	24.8
1975	13.6	9.5	13.5	13.4	24.8	11.9	7.3	18.6	20.0
1976 r	12.4	8.7	12.2	12.6	23.1	11.1	6.9	18.0	16.5
1977 p	12.2	8.7	11.2	12.2	22.9	10.8	7.0	17.7	15.9
Average expenditure per day (£)									
1970	4.2	3.4		6.2	3.9	5.1	10.6	2.9	2.5
1971	4.7	3.9		6.5	4.5	5.5	11.2	3.2	2.5
1972	5.1	4.3	4.8	6.8	4.8	6.0	12.4	3.3	3.0
1973	6.1	5.2	5.9	7.7	6.0	7.1	12.7	3.9	4.0
1974	7.5	6.1	7.5	9.1	7.9	8.1	16.4	4.9	5.0
1975 r	9.3	7.7	10.0	11.0	9.5	10.2	20.3	5.7	6.7
1976 r	12.9	10.6	14.4	14.5	13.7	13.9	26.9	7.6	10.5
1977 p	15.4	12.4	16.6	16.8	17.4	16.7	32.3	9.7	11.5
Average expenditure per visit (£)									
1970	63.3	45.7		75.5	112.0	60.7	75.7	53.1	67.8
1971	69.1	48.4		81.7	125.2	66.1	80.5	60.0	75.7
1972	75.2	45.1	80.5	86.6	134.0	71.8	86.9	61.8	88.3
1973	87.1	53.4	95.3	99.2	161.5	85.2	98.0	72.7	98.3
1974	104.2	60.2	118.5	121.9	195.2	97.4	118.2	90.6	124.2
1975 r	125.6	73.4	134.6	147.2	235.3	121.4	147.7	105.9	134.7
1976 r	160.3	92.7	174.7	182.6	315.8	154.5	187.2	137.0	172.9
1977 p	187.4	107.8	185.3	205.1	397.6	180.9	226.5	171.0	181.8

[1] Including the Irish Republic, excluding Channel Islands. [2] Including the Irish Republic from 1972. p Provisional. r Revised.

Table 4 **Numbers of visits and expenditure of overseas visitors analysed by area of permanent residence and purpose of visit, 1977 p**

	Numbers of visits Thousands						Expenditure £ millions					
Area of permanent residence	Total	Holiday	Of which inclusive tours	Business	Visiting friends and relatives	Miscellaneous	Total[2]	Holiday	Of which inclusive tours	Business	Visiting friends and relatives	Miscellaneous
All countries	11 490	5 586	—	2 019	1 893	1 992	2 179.1	1 010.2	—	457.3	323.7	362.2
Western Europe EEC countries[1]	4 890	2 284	747	922	675	1 010	541.6	229.3	82.5	139.3	58.7	114.2
Western Europe non-EEC countries	1 622	802	454	342	202	276	300.4	128.2	68.3	77.9	27.9	66.5
North America	2 215	1 182	366	291	425	316	454.2	239.5	60.5	82.9	79.8	52.1
Other countries	1 981	1 004	160	310	363	304	787.4	375.1	27.8	145.2	141.6	125.5
Irish Republic	783	315	—	154	229	85	69.7	38.1	—	12.0	15.7	3.9

[1] Excluding Irish Republic. [2] Including Channel Islands in all countries expenditure total only. p Provisional.

tination of inclusive tour visitors, attracting 46 per cent of the total number, with Italy, France and Greece attracting the next highest proportions of 9 per cent, 8 per cent and 6 per cent respectively.

Method of travel

Sixty-three per cent of UK residents travelling abroad in 1977 went by air and 34 per cent travelled by sea, including 1 per cent on cruises. These proportions differ only marginally from those in 1976. Tourist purpose travel across the Irish border is estimated to account for the remaining 3 per cent as in the two previous years.

Of visits to EEC countries, 39 per cent were by air in 1977 compared with 38 per cent in 1976. The predominence to visits to non-EEC western European countries by air increased to 90 per cent compared with 87 per cent in 1976. Air transport was used on 61 per cent of holiday visits to all areas, the same proportion as in 1976, and on 79 per cent of business visits, also the same as the previous year.

Seasonal pattern

The spread through the quarters of 1977, of visits abroad by UK residents, followed the pattern of the previous two years, with percentages of 16, 26, 40 and 18 for the respective four quarters. The proportion of holidays taken in the third quarter of 1977 was 46 per cent, being slightly down on the recorded proportions for 1976 and 1975 of 47 per cent and 48 per cent respectively.

Table 5 **Visits abroad by United Kingdom residents: numbers of visits and expenditure abroad by main country visited, 1976-77**

Main country visited	Numbers of visits Thousands 1976 r	Numbers of visits Thousands 1977 p	Expenditure [3] £ million 1976 r	Expenditure [3] £ million 1977 p
Belgium/ Luxembourg	472	439	21.1	21.1
Netherlands	531	463	30.7	28.9
France	2 036	2 127	118.6	124.6
FR Germany	673	729	43.2	54.3
Denmark	109	111	9.8	9.5
Italy	690	651	68.6	73.6
Republic of Ireland	1 248	1 424	79.0	99.4
EEC	5 760	5 945	371.2	411.4
Norway/Sweden/ Finland	220	202	23.0	26.8
Switzerland	252	201	25.3	20.6
Austria	197	183	20.3	23.6
Spain	2 170	2 058	209.2	207.9
Portugal	85	166	11.6	21.3
Greece	356	354	41.9	44.1
Other western Europe	446	418	47.5	53.3
Western Europe (non-EEC)	3 725	3 584	379.0	397.6
USA	346	371	65.5	80.9
Canada	200	201	31.5	28.8
North America	547	573	97.0	109.7
Eastern Europe	158	109	15.7	13.6
Australia	46	51	11.4	16.9
New Zealand	17	17	4.6	5.4
South Africa	59	45	12.4	9.2
Commonwealth Caribbean	85	82	14.9	14.1
Latin America	27	33	8.0	12.8
Japan	10	10	4.7	3.7
Middle East	136	175	28.2	37.8
North Africa	139	122	17.0	17.0
Rest of Africa	93	90	13.4	14.2
Rest of world	135	160	24.7	32.5
Other countries	903	895	155.0	177.1
Total all countries	11 079 [1]	11 129 [1]	1 006.2 [2]	1 101.9 [2]

[1] Including cruise holidays not allocated to area (144 000 in 1976, 133 000 in 1977). [2] Includes Channel Islands expenditure not allocated to area. [3] Cruise holiday expenditure allocated to countries visited. p Provisional. r Revised.

A further article will be published later in the year with additional results and comments.

Notes and definitions

The international passenger survey

The system of interviewing passengers was described in the *Board of Trade Journal*, 23 August 1963. The Office of Population Censuses and Surveys (acting on behalf of the Department of Trade as well as meeting its own requirements) interviews a stratified and random sample of passengers entering and leaving this country on all the principal air and sea routes (other than those to the Irish Republic) to obtain information about international migration, tourism, and the contribution of travel expenditure to the balance of payments. The interviews are voluntary and anonymous; an estimated 244,000 interviews were carried out in 1977 on the routes surveyed.

About 85 per cent of the passengers entering and leaving the UK, other than those on routes to and from the Irish Republic, travel on routes which were covered by the survey and at times when passengers were interviewed. Estimates are made for non-surveyed times and routes, the numbers travelling on which are known. Information about the numbers and expenditure of passengers travelling between the Irish Republic and the UK is obtained from the Central Statistics Office of the Irish Republic.

Estimates are included also for expenditure by visitors to the UK in transit, and for overseas expenditure by British passengers on cruises or on excursion vessels making day trips to the continent.

Sampling scheme

At Heathrow airport during 1977 approximately 1.3 per cent of the incoming and outgoing passengers on the long air routes and 0.67 per cent of incoming and outgoing passengers on the short air routes were interviewed.

At the smaller airports which are regularly covered, the percentages sampled ranged between 0.6 per cent and 3.8 per cent in the winter months (first and fourth quarters) and between 0.8 per cent and 2.8 per cent in the summer months.

From April 1975 all airports handling international passenger traffic were included in the sample. In addition to the regular coverage of all Heathrow terminals, Gatwick, Luton, Manchester-Ringway and Prestwick, a number of visits were made to airports with lower international traffic densities at which the percentage of traffic samples is 0.1 per cent.

The sample weights are adjusted for known traffic densities and appropriate allowances made for traffic not covered.

When the short sea routes are sampled, about one third per cent of all traffic is interviewed. In a two-stage sample, either the cross-Channel boats are sampled in proportion to the weight of traffic handled in the previous year and a predetermined minimum number of passengers is interviewed in each selected boat or a sample of shifts is taken and passengers interviewed on shore using a pre-determined sampling interval. One-third per cent of traffic was also interviewed on Hovercraft flights from April to December.

On the long sea routes liners or other ships carrying only cruise passengers are excluded from the survey, but all other ships carrying more than 12 passengers arriving or departing are covered in a sample of, in total, approximately 4 per cent of incoming and outgoing passengers.

Migration

The international passenger survey defines a 'migrant' as a resident of the UK leaving for another country, or a resident of a country outside the British Isles arriving in the United Kingdom, who has stated the intention of remaining in the receiving country for 12 months or more. These data are analysed by the Office of Population Censuses and Surveys to estimate gross and net migration into and out of England and Wales, and, in conjunction with the Registrars General for Scotland and Northern Ireland, migration for the United Kingdom as a whole.

Statistics obtained from the Survey are made available in the quarterly publication *Population Trends* and, in more detail, in annual reference volumes, *International Migration*. Two of these, covering the years 1974 and 1975, have so far appeared.

A series of Migration Monitors are published as and when data becomes available. They give an indication of changes in

Table 6 **United Kingdom residents: average length of stay outside the United Kingdom and average expenditure per day per visit, by area visited and by purpose of visit, 1970-77**

	Total [1]	Analysis by area of permanent residence: Western Europe EEC countries [2]	Western Europe non-EEC countries	North America	Other countries	Analysis by purpose of visit: Holiday	Business	Visiting friends and relatives	Miscellaneous
Average length of stay (days)									
1970	14.8	13.1		34.3	35.3	13.8	9.1	22.0	27.1
1971	14.2	12.3		31.8	35.4	13.3	9.4	21.3	23.7
1972	13.9	10.5	12.9	31.1	34.1	12.8	9.4	20.5	24.8
1973	13.9	10.9	13.0	29.1	33.1	12.9	8.7	21.2	23.9
1974	13.4	9.3	13.3	29.4	35.5	12.3	8.2	21.3	22.4
1975	13.5 r	9.4	13.5	28.7	36.3	12.3 r	8.7	21.8	18.5
1976 r	13.6	9.3	13.7	28.1	33.9	12.3	9.1	21.5	18.8
1977 p	13.3	9.0	13.3	26.9	35.1	12.1	8.5	21.1	17.9
Average expenditure per day (£)									
1970	2.9	3.1		2.6	2.4	3.1	6.0	1.5	1.6
1971	3.2	3.4		2.9	2.5	3.3	6.3	1.7	1.8
1972	3.5	3.8	3.8	3.0	2.7	3.7	7.0	1.8	1.8
1973	4.2	4.2	4.8	3.5	3.0	4.6	7.9	2.0	2.1
1974	4.8	5.0	5.5	4.0	3.3	5.2	9.7	2.3	2.4
1975 r	5.6	6.0	6.3	5.0	3.8	6.3	10.4	2.7	3.3
1976 r	6.7	6.9	7.4	6.3	5.1	7.4	13.0	3.0	3.5
1977 p	7.4	7.6	8.3	7.1	5.6	8.1	16.0	3.3	3.9
Average expenditure per visit (£)									
1970	43.1	40.8		88.5	84.8	42.6	54.3	34.0	42.5
1971	45.3	42.1		92.2	88.4	44.2	59.0	35.8	43.1
1972	49.0	39.7	49.4	93.1	92.8	47.8	65.9	37.4	47.9
1973	58.3	45.4	62.4	103.1	100.3	59.8	68.6	43.4	49.9
1974	63.9	46.3	72.8	117.4	117.7	64.1	79.5	49.1	52.9
1975 r	75.4	55.9	85.2	142.1	137.9	77.0	90.9	58.0	60.5
1976 r	90.5	64.4	101.7	177.5	171.6	91.6	117.7	64.8	65.6
1977 p	98.5	69.2	111.0	191.5	197.8	97.7	136.8	69.6	69.3

[1] Including the Irish Republic, excluding Channel Islands. [2] Including the Irish Republic from 1972. p Provisional. r Revised.

Table 7 **Numbers of visits and expenditure of United Kingdom residents analysed by area visited and purpose of visit, 1977** p

Area visited	Numbers of visits Thousands: Total	Holiday	Of which inclusive tours	Business	Visiting friends and relatives	Miscellaneous	Expenditure £ millions: Total [3]	Holiday	Of which inclusive tours	Business	Visiting friends and relatives	Miscellaneous
All countries [2]	11 129	6 535	—	2 053	1 948	594	1 101.9	638.2	—	280.8	135.6	41.2
Western Europe EEC countries [1]	4 521	2 361	813	1 120	641	400	312.0	166.1	80.0	96.8	28.6	20.5
Western Europe non-EEC countries	3 584	3 015	2 379	309	202	59	397.6	332.8	271.3	43.1	13.9	7.8
North America	573	170	12	133	249	21	109.7	31.4	4.0	42.4	32.0	3.9
Other countries	895	338	151	266	256	35	177.1	50.1	25.5	89.1	32.5	5.5
Irish Republic	1 424	519	—	226	600	79	99.4	57.8	—	9.5	28.6	3.5

[1] Excluding Irish Republic. [2] Cruises included in holiday visits. [3] Including Channel Islands in all countries' expenditure total only. p Provisional.

Table 8 Numbers of visits, earnings and expenditure, 1976-77 [1]

	Visits				Earnings		Expenditure		Balance
	To the UK by overseas visitors		Overseas by UK residents [2]						
	Thousands	Increase on previous year (%)	Thousands	Increase on previous year (%)	£ million	Increase on previous year (%)	£ million	Increase on previous year (%)	£ million
1976									
1st qtr r	1 472	−0.2	1 614	−5.0	211	22.2	139	13.5	+72
2nd r	2 399	14.2	2 965	0.7	351	43.6	243	18.7	+108
3rd r	3 974	12.7	4 516	−9.5	656	45.4	415	7.8	+241
4th qr	2 227	27.6	1 984	0.5	415	63.0	209	26.6	+206
1977									
1st qtr p	1 867	26.8	1 746	8.1	332	57.1	169	21.6	+163
2nd p	2 909	21.3	2 905	−2.0	496	41.3	275	13.1	+221
3rd p	4 477	12.7	4 439	−1.7	850	29.6	439	5.5	+411
4th p	2 237	0.5	2 039	2.8	501	20.8	219	5.2	+282

[1] Including Irish Republic. [2] Including cruises. p Provisional. r Revised.

certain aspects of migration for successive quarters of the year. These monitors are available from Information Branch (Dept M), Office of Population Censuses and Surveys, St Catherines House, 10 Kingsway, London WC2B 6JP.

Estimates of fares
The international passenger survey yields estimates of the fares earned by British airlines and sea carriers from visitors to the UK, and fares paid by UK residents to overseas carriers. The estimates of air fares are based on information given by passengers about the flight number, the airport of origin or destination, the class of travel, and the types of fare paid. On sea routes, the passenger is asked directly the fares paid, because of the considerable variations within each class of travel, but estimates are made on similar lines as for air travel when the passenger does not know the actual fare paid.

Coverage
Apart from the comments in the text, further points of coverage are as follows.

Earnings and expenditure figures include small amounts in respect of internal rail fares. Excluded are overseas visitors' purchases on British carriers or at the duty-free shops. Earnings include estimates of the expenditure of overseas visitors in transit or on day trips to this country. Similarly expenditure estimates include the expenditure of UK residents going abroad on day trips or cruises.

A consequence of the inclusion of these estimates is that the earnings and expenditure figures do not exactly correspond to the figures for numbers of visits, which exclude visitors in transit and those on day trips.

Migrants and persons travelling overseas to take up employment together with military personnel, merchant seamen and airline personnel travelling on duty, are excluded.

Definitions
The numbers are numbers of visits, not numbers of visitors. Anyone entering or leaving more than once in the same period is counted on the occasion of each visit.

The count of visits relates to those ending during each period, ie to British residents returning to this country and to overseas residents leaving it.

'Overseas visitor' means a person who, being permanently resident in a country outside the United Kingdom, visits the United Kingdom for a period of less than 12 months. Included are UK citizens resident overseas for 12 months or more coming home on leave.

Visits abroad similarly are visits for a period of less than 12 months by persons permanently resident in the UK (some of whom may be of foreign or Commonwealth nationality).

Visits for miscellaneous purposes include visits for the purpose of study, to attend sporting events, for shopping, health, religious or other purposes, together with visits for more than one purpose where none predominates (eg visits both on business and on holiday).

Average length of stay covers:
1 Overseas visitors – stay within the UK.
2 Residents of UK – time spent, including journey time, outside the UK.

An inclusive tour is defined as a visit for which the tourist is unable to distinguish (within the total cost of the visit) the prepaid cost of his fare to and from his destination from the cost of accommodation.

Areas
The geographical divisions are:
1 Western Europe EEC: Belgium, Denmark (including Faeroe Islands and Greenland), Federal Republic of Germany, France (including Monaco), Irish Republic, Italy (including San Marino), Luxembourg, the Netherlands.
2 Western Europe non-EEC: Austria, Cyprus, Finland, Gibraltar, Greece, Iceland, Malta, Norway, Portugal (including Azores and Madeira), Spain (including Canary Islands), Sweden, Switzerland (including Liechtenstein), Turkey, Yugoslavia.
3 North America: Canada, United States (including Puerto Rico and US Virgin Islands).
4 Eastern Europe: Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, USSR.
5 Commonwealth Caribbean: Antigua, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St Kitts-Nevis-Anguilla, St Lucia, St Vincent, Trinidad and Tobago, Turks and Caicos Islands.
6 Latin America: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, French Guiana, Guadeloupe, Guatemala, Haiti, Honduras, Martinique, Mexico, Netherlands Antilles, Nicaragua, Panama (including Canal Zone), Paraguay, Peru, Suriname, Uruguay, Venezuela.
7 Middle East: Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, North Yemen, Oman, Qatar, Saudi Arabia, South Yemen, Syria, United Arab Emirates.
8 North Africa: Algeria, Libya, Morocco (including Tangier), Sudan, Tunisia, Egypt, Spanish North Africa (Ceuta and Melilla)

Inquiries: 01-212 5555.

Why the BSO is holding a purchases inquiry in 1979

Early in 1980 some 18 000 firms, mainly in manufacturing industry, will receive a form from the Business Statistics Office asking for information about their purchases of materials and fuel in 1979. To give advance notice of the details that will be required, they are being sent this month a specimen form and a leaflet explaining why the inquiry is being held and what has been done to reduce as far as possible the additional work that this will cause.

The specimen form is being sent in advance – so that companies can see at an early stage what information will be needed. BSO hopes that this will help companies to plan the extraction of the figures from records so that filling in the forms will be less troublesome when the time comes. If precise figures are not available, or are difficult to provide, reasonable estimates will be acceptable, says BSO.

The major purpose of the figures is to compile measures of changes in prices as they affect industry as purchasers of materials and goods. BSO gets a lot of information regularly about the prices of individual materials, components, etc, that are used for subsequent manufacture or processing. But it is necessary to know how important each item is as an element of total costs so that the impact of price changes on industry's cost can be clearly seen.

The purchases inquiry provides this essential information. With it the price quotations are built up into index numbers which show how these prices are changing – not only for manufacturing industry as a whole but also for groups and individual industries within it. The basis of the calculation of these index numbers must be brought up to date from time to time.

The purchases price indices are used very extensively. They show how price changes are affecting industries' costs and thus give early indications of what is likely to happen as these work their way through to prices in the shops and our exports. The government needs to know this, but there is also much wider interest in these figures. Industry needs a measure of its changing costs.

One example of this is in contracts containing escalation clauses: the government can provide suitable indices for fairly narrowly defined industries for use in such contracts. Another example is the revaluation of stocks of materials and fuel for inflation accounting: the government helps by providing indices in the publication 'Price index numbers for current cost accounting' (HMSO, price £3.50).

The results of the purchases inquiry are also key information for the construction of 'input-output' tables. To a considerable extent the output of one industry is purchased by another for incorporation in its own products or for further processing. Input-output tables measure this interdependence between industries and tell a great deal about how the economy works. They indicate how changing economic circumstances and government measures are likely to affect particular industries – for example how an interruption in production or a sudden large price rise in one industry is going to affect the rest of the economy.

The government uses them in this way and so do many bodies and commentators, to help understand our complex economic system.

What has been done to reduce the form-filling burden?
This inquiry is being held to obtain information that the government really needs to have, but supplying them can be particularly difficult for firms. So the inquiry is held only occasionally; the last one was taken in 1974 and the one before that in 1968.

To try to keep the form filling burden to a minimum BSO wrote to more than 360 trade associations about plans for the 1979 inquiry and asked for views on the questions. Then, in June 1978, Les Huckfield, the Parliamentary Under-Secretary of State for Industry, invited representatives of the CBI and of some 60 trade associations, including the main critics, to a meeting to hear their views about the inquiry at first hand and to discuss proposals aimed at minimising its burden.

Mr Huckfield announced revised arrangements for exempting as many small firms as possible from the inquiry. No establishment with fewer than 35 employees will be asked to complete a form and, in the great majority of industries, establishments with fewer than 50 or 100 employees will be exempt.

Manufacturing industries: UK performance since 1963

Industrial Strategy work is focusing attention on the performance of manufacturing industry in far greater industrial detail than has previously been attempted. This article, which to some extent complements the analytical study recently carried out by the Unit for Manpower Studies,[1] presents the results of recent analysis carried out in the Department of Industry. It examines changes in output, overseas trade, investment and employment over the period 1963-76 for 63 sectors of manufacturing industry.

The analysis suggests that fast growth in UK output is strongly associated with fast growth in home demand but not often with improving net overseas trade performance. Where output growth is high labour productivity tends to show a rapid increase partly because fast growing industries often experience a high investment growth rate. In consequence fast growing industries do not necessarily generate big increases in employment within themselves. On the other hand for individual industries there is nothing to suggest that slow growth in productivity can assist employment. This underlines the need to strive to improve productivity in manufacturing industry. This is necessary not only as the basis for higher incomes, but also in order to improve our overseas trading performance and thereby make it easier for the economy as a whole, and employment particularly outside manufacturing, to expand. It is the more disturbing that in the UK domestic markets where growth has been most rapid British industry has on the whole performed less well then overseas producers.

General

Long-term changes in industrial structure are the result of the simultaneous and interacting operation of economic, technological and social factors. Changes in the level and pattern of home and overseas demand, competitiveness – as determined by relative unit labour and capital costs and non-price factors – and technological change interact to produce changes in output and employment.

To assess the change in the competitive position of UK industries requires the comparison of the growth in output of domestic industries with the corresponding growth in world

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[1] 'Britain's industrial performance since the war' – *Department of Employment Gazette*, May 1978.

Table 1 Output and employment

	Per cent change per annum 1963-76 (trend)	
Rates of change		
Gdp (output based) [1]	2.2	
Manufacturing output [1]	2.2	
Employees in employment:		
total	−0.1	
manufacturing	−1.1	
	1963	1976
	Per cent	Per cent
Shares		
Manufacturing output of gdp	31.1	31.0
Employees in manufacturing of all employees in employment	37.0	32.1

[1] National Income and Expenditure Blue Book 1966-76, table 2.2.

Table 2 Industrial performance: analysis by industry

Industry	Gross output [1] 1	Home demand 2	Output – home demand 3	Fixed investment [2] 4	Gross output per head 5	Employment [3] 6	Gross output 1963 7	Gross output 1976 8	Employment 1963 9	Employment 1976 10
	Trend: annual per cent change 1963-76						Share of total manufacturing: per cent			
Electronic computers	20.5	21.5	−1.0	9.3	17.2	2.8	0.1	1.0	0.4	0.6
Broadcast receiving equipment	12.1	14.4	−2.3	8.0	7.0	4.5	0.5	1.1	0.4	0.7
Pharmaceuticals	10.4	10.4	−0.0	7.9	8.2	2.0	0.7	1.8	0.7	1.0
Plastic products n.e.s.	9.8	10.1	−0.3	6.5	5.8	3.8	0.5	1.4	0.9	1.6
General chemicals – organic	8.8	8.1	+0.8	4.5	11.2	−2.1	0.8	1.9	0.7	0.6
Man-made fibres	7.6	7.9	−0.3	0.6	6.8	0.7	0.5	0.9	0.5	0.6
Synthetic rubber	6.5	5.8	+0.6	..	4.2	2.2	0.1	0.1	0.0	0.0
Industrial engines	6.5	7.3	−0.9	6.2	8.5	−1.9	0.3	0.4	0.4	0.4
Synthetic resins etc	6.4	7.8	−1.3	..	4.4	2.0	0.7	1.3	0.4	0.7
Office machinery	6.3	7.0	−0.7	2.0	9.1	−2.6	0.3	0.4	0.4	0.3
Instrument engineering	5.6	6.1	−0.6	4.7	5.9	−0.3	1.0	1.6	1.9	2.0
Radio and electronic components	5.5	7.1	−1.6	9.4	3.7	1.7	0.7	1.0	1.3	1.7
Pumps, valves and compressors	5.2	5.6	−0.4	5.6	3.7	1.4	0.6	0.9	0.9	1.1
Domestic electrical appliances	5.2	7.4	−2.2	2.7	5.4	−0.2	0.7	0.8	0.8	0.8
Drink	5.1	4.6	+0.5	4.2	5.5	−0.4	2.0	3.0	1.6	1.8
Construction and mechanical handling equipment	5.0	4.5	+0.5	1.6	4.3	0.6	1.0	1.5	1.1	1.4
Telecommunications equipment	4.8	6.0	−1.3	4.4	3.3	1.5	0.5	0.6	0.8	1.1
Dyestuffs and pigments	4.8	5.6	−0.8	2.2	4.1	0.6	0.3	0.5	0.2	0.3
Toilet preparations	4.2	4.3	−0.1	4.1	3.1	1.1	0.4	0.5	0.3	0.3
Other electrical goods	4.2	4.7	−0.5	0.8	5.1	−0.9	0.9	1.1	1.6	1.6
Hosiery and knitted goods	3.8	3.5	+0.3	−1.9	4.0	−0.2	1.0	1.3	1.5	1.7
Paint	3.5	3.6	−0.1	2.8	6.8	−3.1	0.5	0,5	0.3	0.2
Carpets	3.4	2.0	+1.3	4.2	3.6	−0.2	0.5	0.6	0.5	0.5
Coal and petroleum products	3.3	2.2	+1.1	0.2	4.4	−1.1	2.5	2.7	0.6	0.5
Other chemicals	3.2	2.4	+0.8	1.0	4.0	−0.8	1.0	1.2	0.9	0.9
Furniture and bedding	3.2	3.2	+0.1	6.1	3.2	0.0	1.0	1.2	1.3	1.5
General chemicals – other	2.7	2.8	−0.0	−1.6	3.3	−0.5	1.5	1.8	1.1	1.2
Other paper and board products	2.7	2.6	+0.1	3.2	3.4	−0.6	1.6	1.8	1.9	2.0
Aluminium	2.5	1.3	+1.2	7.4	3.3	−0.8	0.9	0.9	0.7	0.7
Clothing	2.3	3.0	−0.7	1.5	4.3	−1.9	2.3	2.4	5.0	4.4
Other mechanical engineering	2.3	2.2	+0.0	0.5	3.2	−0.9	1.8	1.8	2.4	2.6
Building materials, pottery and glass	2.3	2.2	+0.0	2.0	3.9	−1.6	3.0	3.2	3.9	3.7
Other manufacturing	1.7	2.2	−0.5	2.5	2.5	−0.8	0.9	1.0	1.3	1.3
Rubber	1.7	1.6	+0.1	−1.1	1.5	0.2	1.3	1.4	1.4	1.6
Other machinery	1.7	1.6	+0.0	0.4	3.1	−1.4	2.3	2.3	3.0	3.0
Radio, radar and electronic capital goods	1.7	0.9	+0.8	1.2	1.2	0.5	0.8	0.7	0.9	1.2
Soap and detergents	1.6	0.9	+0.6	−0.8	5.7	−3.4	0.6	0.6	0.3	0.2
Food manufacturing	1.6	0.7	+0.8	0.5	2.3	−0.8	13.0	12.2	7.4	7.6
Timber and misc. wood manufacturing	1.5	1.1	+0.4	6.6	2.3	−0.8	2.0	1.9	2.0	2.1
Printing and publishing	1.5	1.4	+0.1	0.0	1.9	−0.4	3.6	3.3	4.3	4.5
Agricultural machinery	1.3*	2.6	−1.3	1.3	2.5	−1.2	0.3	0.2	0.4	0.4
Engineers' small tools	1.3*	1.5	−0.2	0.3	−0.1	1.3	0.4	0.4	0.6	0.8
Tobacco	1.2	0.8	+0.5	2.0	1.7	−0.5	1.1	0.9	0.5	0.6
Industrial plant and steelwork	1.1*	0.7	+0.4	4.3	1.1	0.0	1.9	1.9	1.9	2.2
Motor vehicles	0.9*	1.6	−0.7	−4.6	0.8	0.2	7.1	6.2	5.3	6.1
Insulated wires and cables	0.7*	0.1	+0.6	0.2	3.6	−2.8	1.1	1.0	0.7	0.6
Fertilisers	0.6	0.1	+0.6	2.0	0.3	0.3	0.6	0.5	0.1	0.2
Other metal goods	0.6*	0.5	+0.1	1.2	1.3	−0.7	5.6	5.0	6.1	6.5
Shipbuilding	0.5*	3.6	−3.1	8.7	2.0	−1.5	1.6	1.3	2.6	2.5
Other textiles	0.3*	0.6	−0.3	2.3	3.6	−3.2	1.5	1.2	2.3	1.8
Textile machinery	0.3*	−0.9	+1.2	−0.8	4.2	−3.8	0.5	0.3	0.6	0.4
Aerospace	−0.2*	−0.8	+0.5	1.9	1.9	−2.1	3.0	2.3	3.2	2.8
Cotton spinning and weaving	−0.3*	0.8	−1.0	0.1	5.2	−5.2	1.6	1.2	2.4	1.4
Paper and board	−0.6*	0.6	−1.2	−2.9	2.2	−2.8	1.4	1.1	1.1	0.9
Footwear	−0.8	−0.2	−0.6	−2.8	2.3	−3.0	0.9	0.6	1.3	1.0
Leather goods and fur	−0.9	−1.7	+0.8	1.7	1.7	−2.6	0.6	0.5	0.7	0.6
Machine tools	−1.0*	−1.1	+0.1	−7.2	2.0	−2.9	0.7	0.4	1.1	0.8
Steel	−1.0*	0.0	−1.0	7.8	1.0	−2.0	6.1	4.7	4.2	3.8
Other non-ferrous metals	−1.5	−1.4	−0.2	−4.3	1.2	−2.7	2.8	1.9	1.0	0.9
Electrical machinery	−2.0	−3.2	+1.2	−1.2	1.8	−3.7	1.8	1.3	2.4	1.9
Iron castings	−2.2	−2.1	−0.1	−0.4	0.7	−2.8	1.2	0.8	1.3	1.1
Woollen and worsted	−3.0	−3.1	+0.1	0.8	3.1	−5.9	2.0	1.0	2.2	1.2
Other vehicles	−4.5	−3.8	−0.7	−1.1	1.9	−6.3	0.8	0.4	1.6	0.7

[1] Gross output was estimated by multiplying gross output in 1970 by the index of production (1970 = 1.00). [2] Gross domestic fixed capital formation. [3] Annual census of employment basis. * Industries for which a linear time-trend did not provide a complete description of the underlying trend. .. Not available.

demand for the products of those industries. Data are not however available on total world demand at the level of detail considered in this article. Instead, the 63 separate industries for which the analysis has been performed have been ranked according to their rate of growth in output as measured by a time trend fitted to the series over the period 1963 to 1976. Growth in domestic output has been compared with the corresponding growth of the domestic market (defined as domestic output plus imports less exports) in order to assess the net performance in overseas trade. Comparisons have also been made between growth in output and the trend growth in investment, employment and productivity.

The industry detail corresponds roughly to minimum list headings (MLH) of the standard industrial classification. A considerable amount of estimation has been involved in producing annual series for 1963 to 1976 at this level of detail, particularly for the earlier years. The value data on which the analysis has been based are at constant (1970) prices and to construct these series more broadly based deflators have been used where price information was inadequate at this detailed industry level. One particular difficulty that affects any attempt to draw conclusions about productivity changes is the lack of precise comparability between the output and employment series.

Total manufacturing

Table 1 compares the annual rate of change in gross domestic product (gdp) over the period 1973 to 1976 with that in manufacturing output. It also shows how the total number of employees in employment has moved in relation to the number of employees in the manufacturing sector.

Between 1963 and 1976 the trend growth rate in manufacturing output was 2.2 per cent per annum, much the same as the growth rate in gdp. Growth rates were however higher during the first half of the period, as was the growth rate of manufacturing relative to gdp. Over the same 14-year period employment in manufacturing fell by approximately 1.1 per cent per annum while the total number of employees in employment remained almost constant.

Manufacturing output as a share of gdp (measured at 1970 prices) was only slightly less in 1976 than it was in 1963. The share of employment in manufacturing fell from 37 per cent of total employees in employment in 1963 to 32 per cent in 1976.

Analysis by industry

The 63 industries are presented in table 2 ranked according to their trend growth in output. The output growth rates are shown in the first column. For industries with marked cyclical variations it is difficult to establish the trend rate of growth. In particular where there has been little change in output over the period it cannot be accurately determined whether the trend is marginally rising or falling. The industries presenting problems in this respect are indicated by an asterisk (*) in the table. A further complication in establishing a clear trend occurs in one or two industries where there has been a marked change in growth rate in the second part of the period compared with the first.

Electronic computers displayed the highest annual growth rate with 20 per cent and the top five industries all had growth rates in excess of 8 per cent a year. At the other end of the scale the bottom four industries all showed a trend decline over the period of more than 2 per cent a year. In 1976 the top 10 industries made up just over 10 per cent of total manufacturing output, while the bottom 10 contributed some 12½ per cent; the corresponding figures for 1963 for these two groups were 4½ per cent and 18½ per cent respectively.

The second column of the table shows the corresponding annual rate of growth in home demand. The high output growth industries are mainly those for which there has been a high growth in the domestic market. The extent of the divergence between growth in output and growth in home demand provides some indication of those industries where the net overseas trade performance has been good (+) or bad (−). There are statistical dangers involved in differencing similar sized quantities which are both subject to error, but these differences (expressed in the form of average annual movements) have been included in column 3 of the table as providing some insight into an important aspect of UK industrial performance. Although about half of the industries achieved a positive rating there was a distinct absence of improved net trade performance amongst those industries with a high growth in output. Of the top 20 fastest growing industries ranked either by growth in output or demand, only four – organic chemicals, synthetic rubber, drink and construction equipment – achieved an improved net trade performance.

The change in total fixed investment [1] is shown in the fourth column of table 2. Although the high output growth industries have also displayed a high growth in investment, the statistical relationship (or correlation) between the trend growth rates in output and investment is not strong. In some sectors where high investment growth has coincided with poor output growth, productivity growth has been relatively low.

The growth in productivity (defined as gross output per head) is given in column 5 of the table. As already mentioned, this series is of only limited value at such fine industry detail because of the problems of securing comparability between the output and employment data. Labour productivity tends to grow rapidly for industries with high output growth partly because these industries often have high investment growth. It is probably easier to secure the benefits of higher investment in the form of increased productivity where demand is growing fast than in a situation of low demand growth. But the relatively weak association between investment growth and productivity growth over the full range of industries is indicative of the difficulties which can arise in trying to improve productivity through higher investment when growth in demand is not strong.

Column 6 of table 2 shows the trend growth rate in employment over the period 1963 to 1976. It indicates that even for the fastest growing industries only modest employment growth has been achieved. The overall positive relationship between employment growth and productivity growth is weak, but, when considered together with the relatively strong association between employment and investment, does not lend support to the view that the movement towards more capital-intensive production methods will necessarily lead to reduced job opportunities. Indeed those industries with the fastest rates of growth in productivity and output also had the highest growth rates in employment.

The remaining columns of table 2 show the relative importance of each industry in terms of its contribution to total manufacturing output and employment. While the five fastest growing industries increased their share of manufacturing output from 2½ per cent in 1963 to over 7 per cent in 1976 their share of employment only rose from 3 per cent to 4½ per cent. Fast investment and productivity growth are associated with the success in these five industries.

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[1] Fixed investment has been used in the absence of a series of capital stock by industry; this latter series would have provided a more useful indicator for the purpose of this analysis.

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Survey of company liquidity: second quarter 1978

Liquidity of the companies replying to the Department of Industry's survey of company liquidity rose in the second quarter of 1978 for the fourth quarter in succession though by a smaller amount than in the first quarter of the year. The companies' net current assets, seasonally adjusted, rose by about £410 million in the quarter. Their liquidity ratio (total current assets as a percentage of total current liabilities), also seasonally adjusted, rose to 143 per cent at the end of the quarter compared with 132 per cent at the beginning. The rise was more than accounted for, in unadjusted terms, by a rise in the liquidity of the non-manufacturing companies. The unadjusted liquidity of the manufacturing companies fell.

Chart 1 illustrates the seasonally adjusted changes in the companies' net current assets and in their liquidity ratio after other adjustments to allow for changes in the survey's coverage at the end of each year, making the results comparable over the whole period of the survey. The chart shows that in this latest quarter both the net current assets and the liquidity ratio continued to rise well above the levels of their previous peak in early 1973. The liquidity ratio is the better measure over a long period because it is not directly influenced by inflation. By the end of 1974 the ratio had fallen to a level similar to that of its previous trough in early 1971. The ratio rose steadily from the beginning of 1975 until early 1976; it fluctuated, rising only slightly, from early 1976 until mid-1977 but has risen sharply since then.

It must be kept in mind that the net current assets and the liquidity ratio do not summarise the whole financial position of the companies, only the position on the selected current assets and liabilities covered by the survey, and companies differ widely in the types of asset and liability they hold. The aggregate changes conceal differing movements for individual companies. Also, the survey covers only 230 or so large companies which may not be representative of industrial and commercial companies as a whole.

Tables 1 and 2 show that, seasonally adjusted, the companies' total current assets rose by about £460 million in the second quarter of 1978 and that their total current liabilities rose by about £50 million, giving a rise in net current assets of about £410 million, following a rise in the previous quarter of about £670 million. On an unadjusted basis, total current assets rose by £429 million and total current liabilities rose by £53 million, giving a rise in net current assets in the second quarter of 1978 of £376 million, compared with a rise of £561 million in the previous quarter.

Manufacturing and non-manufacturing companies

The unadjusted rise in the net current assets was more than accounted for by a rise in the net current assets of the survey companies engaged mainly in non-manufacturing while the net current assets of the mainly manufacturing companies fell. Table 3 shows that, unadjusted, the manufacturing companies' total current assets rose by £29 million and that their total current liabilities rose by £100 million, giving a fall in net current assets of £71 million, compared with a rise of £340 million in the previous quarter. For the non-

Chart 1 **Liquidity ratio and net current assets: all survey companies**
(Adjusted to allow for changes in coverage, seasonally adjusted)

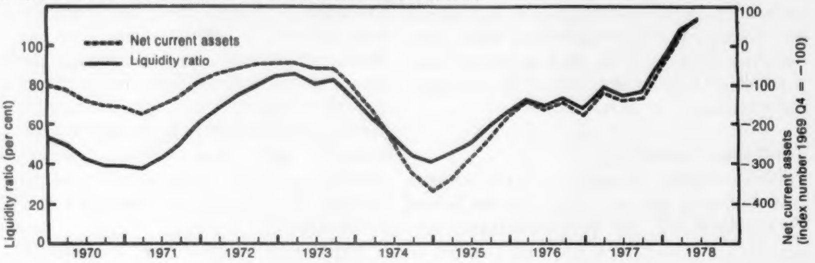

Table 1 **Holdings of current assets and liabilities by survey companies [1]: amounts outstanding at end of period**

£ million

	1976				1977					1978	
	2nd qtr	3rd qtr	4th qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	4th qtr	1st qtr	2nd qtr
Number of companies [2]	211	211	211	210	210	210	210	210	228	228	228
NOT SEASONALLY ADJUSTED											
Current assets											
Deposits with banks in the UK:											
Clearing banks	691	823	873	887	958	846	921	1 028	1 057	1 165	1 383
Other banks	1 256	1 378	1 246	1 249	1 340	1 326	1 312	1 501	1 724	1 990	2 314
Deposits with finance houses [3]	105	112	122	121	108	157	154	171	190	192	213
Deposits with building societies	3	3	3	3	3	3	3	6	7	10	6
Negotiable certificates of deposit (sterling and dollar)	95	111	127	119	122	155	169	107	99	243	181
British government securities	255	257	298	289	301	336	353	377	437	418	441
Local authority bills and temporary money	186	167	238	234	244	191	178	171	166	162	120
Local authority mortgages and loans	40	45	64	65	88	80	91	73	106	93	81
Other current assets [4]	105	131	49	52	65	82	287	366	428	292	256
Total current assets [5]	2 737	3 027	3 021	3 019	3 228	3 176	3 469	3 801	4 213	4 565	4 994
Current liabilities											
Advances and loans from banks and other financial institutions in the UK:											
Clearing banks [6]	1 774	1 637	2 000	1 952	1 794	1 814	1 674	1 684	1 841	1 687	1 858
Other banks [6]	1 564	1 662	1 658	1 464	1 481	1 541	1 689	1 587	1 811	1 727	1 581
Other financial institutions [7]	114	117	72	49	57	64	74	52	64	93	121
Total current liabilities [5]	3 453	3 416	3 730	3 465	3 331	3 419	3 437	3 322	3 716	3 507	3 560
Net current assets	−716	−389	−709	−446	−103	−243	32	479	497	1 058	1 434
Liquidity ratio (per cent) [8]	79	89	81	87	97	93	101	114	113	130	140
SEASONALLY ADJUSTED											
Total current assets	2 775	2 955	3 003	3 001	3 254	3 213	3 379	3 783	4 193	4 594	5 051
Total current liabilities	3 425	3 452	3 771	3 503	3 308	3 397	3 478	3 360	3 758	3 490	3 540
Net current assets	−650	−497	−768	−502	−54	−184	−99	423	435	1 104	1 511
Liquidity ratio (per cent) [8]	81	86	80	86	98	95	97	113	112	132	143

Notes

[1] Companies in the Department of Industry's survey of company liquidity.

[2] Estimates are included until the end of the year for companies that ceased to reply during the year; those companies are then removed from the survey. Some companies were brought into the survey at the end of 1977. Two sets of figures are given for the fourth quarters to show the effects of these and other changes in coverage at year-ends.

[3] From the beginning of 1978, including only deposits with an initial term of not more than 12 months.

[4] Other current assets comprise holdings of notes and coin, Treasury bills and tax instruments.

[5] Components are rounded independently of the totals.

[6] From the beginning of 1975, including only advances and loans with an initial term of not more than 12 months.

[7] Including only advances and loans with an initial term of not more than 12 months.

[8] Total current assets as a percentage of total current liabilities.

manufacturing companies the table shows that, unadjusted, total current assets rose by £400 million and total current liabilities fell by £46 million, giving a rise in net current assets of £446 million, compared with a rise of £221 million in the previous quarter.

Charts 2 and 3, which are not seasonally adjusted but which have been adjusted to make the results comparable over the whole period of the survey, show that the total current assets of the manufacturing companies rose steadily from the beginning of 1975 until the first quarter of 1978, remaining virtually level in the second quarter of 1978, and that their total current liabilities fell steadily from early 1975 until early 1976, remaining relatively level since then, though they rose in the latest quarter. For the non-manufacturing companies the charts show that both total current assets and total current liabilities remained relatively level from early 1975 until mid-1977; since then their total current assets have risen sharply and their total current liabilities have fallen sharply.

For both types of company, the level of total current liabilities since the beginning of 1975 may have been affected by possible switching from short-term to longer-term borrowing, which, as mentioned in the notes at the end of

Chart 2 **Total current assets: manufacturing and non-manufacturing survey companies**

(Adjusted to allow for changes in coverage, not seasonally adjusted)

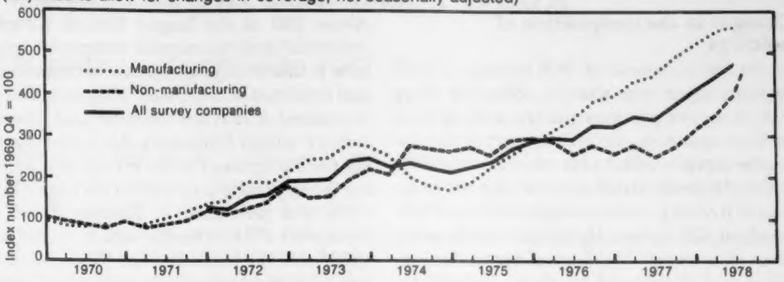

Chart 3 **Total current liabilities: manufacturing and non-manufacturing survey companies**

(Adjusted to allow for changes in coverage, not seasonally adjusted)

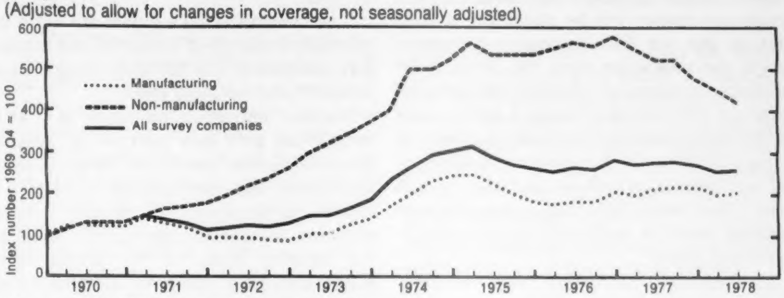

Table 2 **Changes in holdings of current assets and liabilities of survey companies** [1]

£ million

								1976		1977				1978	
	1971	1972	1973	1974	1975	1976	1977	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr
NOT SEASONALLY ADJUSTED															
Current assets															
Deposits with banks in the UK:															
Deposit banks/clearing banks [8]	49	117	173	73	133	215	141	132	50	71	−112	75	107	108	218
Other banks [8]	91	240	258	21	302		252	122	−132	91	−14	−14	189	266	324
Deposits with finance houses [3]	52	−21	−17	−101	33	25	50	7	10	−13	49	−3	17	2	21
Deposits with building societies	2	−2	3	−1	−1	—	3	—	—	—	—	—	3	3	−4
Negotiable certificates of deposit (sterling and dollar)	121	231	−47	−144	−12	30	−12	16	16	3	33	14	−62	144	−62
British government securities	−13	16	39	−39	92	123	88	2	41	12	35	17	24	−19	23
Local authority bills and temporary money	61	55	121	−120	22	43	−63	−19	71	10	−53	−13	−7	−4	−42
Local authority mortgages and loans	—	14	−10	15	−1	11	8	5	19	23	−8	11	−18	−13	−12
Other current assets [4]	−1	−4	−23	7	92	−69	314	26	−82	13	17	205	79	−136	−36
Total current assets [5]	362	645	495	−291	663	379	782	290	−6	209	−52	293	332	352	429
Current liabilities															
Advances and loans from banks and other financial institutions in the UK:															
Deposit banks/clearing banks [6] [8]	−246	162	611	765	−558	405	−268	−137	363	−158	20	−140	10	−154	171
Other banks [6] [8]	115	20	306	913	−100		123	98	−4	17	60	148	−102	−84	−146
Other financial institutions [7]	−21	27	9	30	9	−49	3	3	−45	8	7	10	−22	29	28
Total current liabilities [5]	−153	209	924	1 708	−649	356	−143	−37	314	−134	88	18	−115	−209	53
Net current assets	515	436	−429	−1 999	1 312	23	925	327	−320	343	−140	275	447	561	376
SEASONALLY ADJUSTED															
Total current assets								180	48	253	−41	166	404	401	457
Total current liabilities								27	319	−195	89	81	−118	−268	50
Net current assets								153	−271	448	−130	85	522	669	407

Notes: 1 and 3-7: see table 1. [8] To the end of 1975, the figures relate to the former groupings of deposit banks and other banks; from the beginning of 1976, five banks that were deposit banks have been re-grouped as other banks and the remainder renamed clearing banks. Combined figures are given for 1976 to avoid any possibility of disclosing figures relating to individual companies.

Table 3 **Holdings of current assets and liabilities by manufacturing and non-manufacturing survey companies** [1]**: amounts outstanding at end of period**

£ million

	1976				1977					1978	
	2nd qtr	3rd qtr	4th qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	4th qtr	1st qtr	2nd qtr
MANUFACTURING COMPANIES											
Number of companies [2]	143	143	143	143	143	143	143	143	155	155	155
Not seasonally adjusted											
Total current assets [5]	1 517	1 709	1 775	1 762	1 879	1 966	2 144	2 277	2 652	2 836	2 865
Total current liabilities [5]	2 060	2 039	2 305	2 134	2 064	2 205	2 230	2 217	2 453	2 297	2 397
Net current assets	−543	−330	−530	−372	−185	−239	−86	60	199	539	468
Liquidity ratio (per cent) [8]	74	84	77	83	91	89	96	103	108	123	120
NON-MANUFACTURING COMPANIES											
Number of companies [2]	68	68	68	67	67	67	67	67	73	73	73
Not seasonally adjusted											
Total current assets [5]	1 220	1 319	1 246	1 258	1 349	1 211	1 324	1 524	1 561	1 729	2 129
Total current liabilities [5]	1 392	1 377	1 425	1 331	1 267	1 213	1 207	1 105	1 263	1 210	1 164
Net current assets	−172	−58	−179	−73	82	−2	117	419	298	519	965
Liquidity ratio (per cent) [8]	88	96	87	95	106	100	110	138	124	143	183

See notes 1, 2, 5 and 8 to table 1.

this article, has not been covered by the survey since the beginning of 1975.

Changes in the composition of holdings

In the second quarter of 1978 holdings of bank deposits again rose sharply, following sharp rises in the two previous quarters and, again as in those quarters, the greater part of the rise was in deposits with banks other than clearing banks. Deposits with finance houses and holdings of British government securities each rose by about £20 million. Holdings of all the other types of asset fell. Holdings of negotiable certificates of deposit fell by about £60 million, following a rise of £144 million in the previous quarter. Holdings of local authority bills and temporary money fell by about £40 million making this the fifth successive quarter in which the companies have run down those holdings. Holdings of other current assets fell by about £40 million following a fall of about £140 million in the previous quarter, mainly as a result of falls in both quarters of holdings of tax instruments, which are included in this item. There were slight falls in deposits with building societies and local authority mortgages and loans.

In liabilities, borrowing from clearing banks rose, off-setting the fall in the previous quarter, while borrowing from other banks fell. There was a small rise in borrowing from other financial institutions, making the overall change in total current liabilities a small rise. At the end of the quarter borrowing from clearing banks accounted for 52 per cent of total current liabilities and borrowing from other banks for 44 per cent, compared with 48 per cent and 49 per cent respectively at the beginning of the quarter.

Notes

About 230 of the largest United Kingdom industrial and commercial companies contribute to this survey, which covers certain assets and liabilities in the United Kingdom that can be realised or that are due to be paid, formally at least, within 12 months. An article describing the background to the survey, and reviewing the results since its start at the beginning of 1970, was published in *Economic Trends* for November 1974. A further article, in the May 1977 issue of *Economic Trends*, compared the results of the survey with those for all industrial and commercial companies up to the end of 1976.

The companies taking part are not a representative sample of industrial and commercial companies. Not all large companies are included and no small ones.

Another important limitation is that the results can give only part of the complete financial picture that would be given by the full sources and uses of funds account. This applies, in particular, to the two summary measures of liquidity, net current assets and the liquidity ratio, as the article in the November 1974 issue of *Economic Trends* explains. Furthermore, these measures, and the results as a whole, are aggregates for the survey group and they mask wide variation in the financial positions of individual companies.

There is a break in the results of the survey at the end of each year and two sets of figures for the fourth quarters of 1976 and 1977 are given in the tables with this article to show the effects. One reason for this is that since the beginning of the survey some companies have ceased to reply. Estimates for those companies are included in the tables until the end of the year in which they ceased to reply, except for companies that ceased to reply because they had amalgamated with other companies in the survey. There have been changes in coverage within a few companies at the beginning of 1977, to make the coverage of this survey as close as possible to the coverage of the survey of company sources and uses of funds and in addition several extra companies began to contribute from the beginning of 1978, giving a net increase in the number of companies.

Some changes in coverage, resulting from changes in definitions, were made in earlier years. In particular, at the beginning of 1975 the definition of current liabilities was clarified and companies were asked to exclude all advances and loans with an initial loan term of over 12 months. More recently, at the beginning of 1976, five banks that were deposit banks were re-grouped with other banks and the remainder of the group has been renamed clearing banks to conform with the reclassification of banks made by the Bank of England in 1975. Total figures for changes in deposits with banks and borrowing from banks are given for 1976 in table 2 to avoid any possibility of disclosure of individual company holdings as a result of this change.

Inquiries: Departments of Industry, Trade and Prices and Consumer Protection, Economics and Statistics Division 6a, Room 248, 1 Victoria Street, London SW1H 0ET, tel. 01-215 5538.

Rebasing of the national accounts: summary of results

Newly compiled estimates of gross domestic product at 1975 factor cost (reported briefly last week) show a growth in activity of nearly 5 per cent between 1975 and 1977, about 1½ per cent more than the most recently published estimates at 1970 prices. The new 1975-based estimates are shown as index numbers in the table below. For purposes of comparison the former estimates at 1970 prices (rescaled to 1975 = 100) are shown in brackets under the new estimates.

Gross domestic product at 1975 factor cost

1975 = 100

Based on:	1973	1974	1975	1976	1977
Expenditure data	103.4	101.7	100	103.6	105.0
	(103.3)	(102.0)	(100)	(103.1)	(103.5)
Income data	103.0	100.7	100	103.0	104.7
	(103.2)	(100.8)	(100)	(102.5)	(103.8)
Output data	103.8	101.9	100	102.2	104.8
	(103.1)	(102.0)	(100)	(101.2)	(102.8)
Average estimate	103.4	101.4	100	102.9	104.8
	(103.3)	(101.7)	(100)	(102.3)	(103.4)

Not all of the differences between the two sets of estimates are due to rebasing (an article giving a detailed assessment of the effects of rebasing will be published in *Economic Trends*). Some new information has become available since the last full national accounts estimates were published in July, and some new methods have been introduced for deriving constant price estimates. It is evident, however, that rebasing the estimates on 1975 relative prices has had little overall effect on the change in gdp between 1973 and 1975; but rebasing has increased the estimated growth over the following two years.

The main reason for the different effects over the two periods lies in the revaluation to 1975 costs and prices of North Sea oil, production of which only started in significant quantities towards the end of 1975. The 'oil effect' can be best demonstrated through the output-based estimates – GDP(O) – where it is possible to identify the contribution to total domestic output of industries in MLH 104 (exploration for and extraction of petroleum and natural gas). The total effect on GDP(O) of rebasing and later information has been to increase the estimate of growth between 1975 and 1977 by

Expenditure on the gross domestic product at 1975 prices

£ million

	1973	1974	1975	1976	1977
Consumers' expenditure	65 497	64 070	63 192	63 320	62 732
General government final consumption	21 426	21 746	22 930	23 416	23 315
Gross domestic fixed capital formation	21 609	21 164	20 817	20 489	19 738
Increase in stocks	2 983	1 462	−1 925	261	1 051
Exports of goods and services	26 147	27 624	26 943	29 386	31 357
Final expenditure at market prices	137 662	136 066	131 957	136 872	138 193
less Imports of goods and services	−31 043	−31 329	−29 028	−30 183	−30 276
GDP at market prices	106 619	104 737	102 929	106 689	107 917
Adjustment to factor cost	−10 933	−10 621	−10 422	−10 829	−10 798
GDP at factor cost	95 686	94 116	92 507	95 860	97 119

Index numbers of output at constant factor cost

1975 = 100

	Weight per 1000	1973	1974	1975	1976	1977
Agriculture, forestry and fishing	28	109	110	100	92	109
Industrial production:						
Mining and quarrying	17	110.2	90.0	100.0	125.8	189.9
Manufacturing	283	109.2	107.3	100.0	102.3	104.2
Construction	74	118.6	106.2	100.0	98.2	97.7
Gas, electricity and water	33	99.3	98.9	100.0	102.8	106.9
Total industrial production	407	110.2	105.7	100.0	102.5	106.8
Transport and communication	88	102	101	100	99	100
Distributive trades	101	106	103	100	101	99
Other services	376	97	97	100	104	105
Gross domestic product	1 000	103.8	101.9	100.0	102.2	104.8

Regional Statistics No. 13 1977

Regional Statistics No. 13 1977 is an essential reference book for professionals with an interest in regional industry, economics, markets or social characteristics. Compiled by the Central Statistical Office, it provides in one volume a detailed quantitative picture of regional variations within the United Kingdom across a broad range of topics; the subject headings are: Regional profiles (which are a selection of key statistics for each separate region and for counties within it), Social characteristics, Social services, Health, Housing, Education, Employment, Energy, Production, distribution and investment, Agriculture, Transport, Personal incomes, Household expenditure and Regional economic accounts. Notes are given in an appendix explaining the sources and definitions of the figures presented, and providing references to further material on each subject covered.

Price £6.50 (by post £7.04)
HMSO, PO Box 569,
London SE1 9NH
ISBN 0 11 630171 6

GDP(O) excluding MLH 104 1975 = 100

	1973	1974	1975	1976	1977
1975-based	103.7	101.9	100	101.6	103.1
1970-based[1] rescaled)	103.1	102.0	100	101.1	102.4

[1] As published in *Economic Trends*, July 1978.

about 2 per cent, of which about 1¼ per cent is attributable to industries in MLH 104. The 1975-based and 1970-based series of GDP(O) excluding MLH 104 are compared above.

In the expenditure-based estimates – GDP(E) – the effect of the change from 1970 prices to 1975 prices in the valuation of oil is shown mainly in the movements of the volume of imports. Reflecting the growing production of North Sea oil, imports of fuels fell by 17 per cent in volume between 1975 and 1977; and this fall has a substantially larger weight in the measurement of the movement of all imports when valued at 1975 prices instead of 1970 prices. Largely for this reason the growth between 1975 and 1977 in imports of goods and services is estimated as 4.3 per cent in the rebased accounts compared with 8.5 per cent in the 1970 based accounts. This change on rebasing is equivalent to an additional growth of around 1¼ per cent in GDP(E). In contrast, rebasing has had the effect of slightly reducing the rate of growth in total domestic expenditure. Consumers' expenditure, the largest component, now shows a fall of about 4¼ per cent between 1973 and 1977 compared with a fall of 2¾ per cent in the 1970-based estimates last published in July. This change of 1½ per cent is equivalent to a reduction of 1 per cent in the growth of GDP(E) over the four years.

The tables show the main components of the expenditure and output based estimates of gdp at 1975 prices. Detailed annual figures are given in the national income and expenditure Blue Book published today (see this page).

Points from the Pink Book

UK balance of payments 1967-77

This year's Pink Book,[1] published by the Central Statistical Office, contains a detailed account of the United Kingdom's balance of payments with the rest of the world in each of the last 11 years. It also includes a new section on the contribution of the continental shelf oil and gas programme to the balance of payments since 1973.

There was a big turnround in both the current and capital accounts between 1976 and 1977. The current balance improved from a deficit of £1.1 billion to a surplus now estimated at £0.3 billion, mainly as a result of production of North Sea oil and gas. The balance on the capital account (including the balancing item) changed from a deficit of £2.5 billion in 1976 to a surplus of £7.1 billion in 1977.

The City. Net overseas earnings of the City totalled £1,747 million in 1977, a slight fall on the previous year's figure of £1,836 million but well up on the level of £1,248 million in 1975. Most sources of income increased between 1976 and 1977, but earnings from commodity trading (£109 million) were about half the previous year's figure. There was also a sharp decline in net interest received by banks from overseas because of the narrowing of the margin between borrowing and lending rates in the Euro-currency markets. Insurance net earnings in 1977 totalled £909 million, which was over £100 million up on the 1976 level and twice the level in 1975.

Sea transport. Earnings from overseas were £3,466 million, but these were nearly matched by payments abroad, eg to foreign shipping lines carrying UK imports.

Civil aviation provided a surplus of £244 million in 1977 despite operational difficulties which meant that overseas earnings by UK airlines did not grow as fast as payments to overseas airlines.

Tourists and other visitors spent £2,179 million in the UK in 1977, almost double the £1,102 million UK residents spent abroad. Net contribution of travel to the balance of payments went up from £627 million in 1976 to £1,077 million in 1977.

Consulting engineers increased their overseas earnings by 43 per cent to £305 million in 1977.

Royalties. Overseas earnings totalled £430 million in 1977, £100 million higher than royalty payments overseas.

Solicitors earned fees of £40 million from overseas clients in 1977. Most of this was for commercial work done by firms operating in the City of London.

Services. There was some increase in the volume of services exported. Tourism and earnings from construction work overseas grew particularly strongly but there were falls mainly in oil tanker operations. Imports of services in most categories decreased in volume terms.

Economic aid in grants to developing countries – given directly by the UK or channelled through international agencies – amounted to £401 million in 1977 compared with £337 million in the previous year.

Gilts. Net purchases of gilts by non-residents amounted to nearly £1 billion. The sale of foreign currency bonds, forward sales of oil by BNOC, and borrowing by other public corporations (outside the exchange cover scheme) led to overseas investment into UK public sector of a further £1 billion.

Sterling balances of private non-resident holders increased by nearly £1.5 billion oil 1977.

Overseas investment in the UK private sector was over £3 billion in 1977, including investment of £1 billion by overseas oil companies.

Outward and inward investment. Outward investment transactions, taken together with associated finance and earnings from earlier investments, contributed nearly £2 billion to the balance of payments in 1977, considerably more than in 1975 and 1976. The favourable effect of inward investment transactions was much smaller than in previous years because, for the first time, foreign companies earned substantial profits on their North Sea activities.

Official reserves grew from £2,485 million at the end of 1976 to £10,975 million at the end of 1977. During this period further borrowing, mainly from the IMF and by the government on the Euro-currency market, increased official financing liabilities from £8,480 million to £9,870 million.

UK continental shelf oil and gas programme contributed over £1½ billion to the improvement in the visible balance between 1976 and 1977, but the build-up of interest, profits and dividends due abroad accounted for a large part of the fall in the surplus on invisibles.

Trade with EEC. Transactions with the other member countries of the EEC and community institutions showed a deficit on current account of £2,030 million. This was slightly smaller than the 1976 deficit of £2,237 million as the balances on both visible trade and travel improved.

Contributions to the EEC amounted to £750 million in 1977, a sharp increase on the previous year's figure of £474 million. However, there were also large payments from the community institutions to the UK, mainly for agricultural support. £171 million was received for this purpose while grants of £60 million came from the regional development fund and £48 million from the social fund.

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[1] 'United Kingdom balance of payments 1967-77' is available from HMSO, £3.95.

Retail sales in July

Volume

The final seasonally adjusted index of the volume of retail sales in July is 111.4 (1971 = 100), rather higher than the provisional estimate of 110½. The estimate suggests a further increase in the level of trade, with the rise concentrated in the sales of non-food shops particularly durable goods shops. Retail trade in July may have been influenced by the payment of back-dated income tax reductions.

The volume of sales in the three months May to July was 2½ per cent higher than in the previous three months and the average level of sales in the first seven months of 1978 was about 4 per cent above the annual average for 1977.

For the main components of total trade, the volume of sales of durable goods shops in the three months May to July was 5 per cent higher than in the previous three months. by clothing and footwear shops rose by 2 per cent while sales by 'other non-food' shops, which include department stores and mail order businesses, rose by 3 per cent. Sales by food shops rose by 2 per cent between these periods.

Value

Based on non-seasonally adjusted data, the value of total retail sales in July was 15 per cent higher than in July 1977. In the first seven months of 1978 the average value of sales was 14 per cent higher than in the corresponding period of 1977.

Notes

The indices for all shops, food shops, and total non-food shops are shown to the first decimal place to help intepretation, but should not be regarded as necessarily accurate to the final digit. The best indication of the recent trend is normally obtained by comparing the average index for the latest three months with the average for the immediately preceding three months, but month-to-month fluctuations may sometimes make it preferable to average two months or four months.

When using the volume figures, it should be borne in mind that, when price increases are large, the various problems associated with revaluation of the value series to constant prices become more acute. Thus, the relative accuracy with which volume changes have been measured is likely to have been reduced in recent periods.

The monthly periods consist of four weeks except those marked [1] which are of five weeks. The July 1978 sales period was the four weeks from 2 July 1978 to 29 July 1978. The corresponding period in 1977 was the four weeks from 3 July 1977 to 30 July 1977.

The value estimates are compiled inclusive of VAT, and will, therefore, reflect changes in the rates of VAT. The volume estimates, however, are not affected by these changes since the retail price indices used to 'deflate' the value data are themselves inclusive of VAT.

Within the total, sales are analysed by 'kinds of business'; ie the statistics are of sales by particular kinds of shop rather than of sales of particular commodities. For example, while sales by shops classified as food shops are mainly of food, many of them also sell other goods. Similarly, some food is sold by shops classified to other kinds of business.

The seasonally adjusted series include, where appropriate, adjustments for the timing of holidays and adjustments to make allowance for the inclusion of an extra week in the January 1975 trading period. No adjustments are made to the non-seasonally adjusted data.

Exceptionally the figures for the retail sales of food shops in June have been revised slightly upwards since the last article because of late returns from contributors.

The article giving the provisional estimate of the seasonally adjusted index of the volume of retail sales for August and the increase in the value of sales compared with a year earlier will be published later this month.

Inquiries: Departments of Trade, Industry, and Prices and Consumer Protection, Economics and Statistics Division 6c, Room 351, Sanctuary Buildings, 20 Great Smith Street, London SW1P 3DB, tel. 01-215 3162.

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Table 1 Volume of retail sales seasonally adjusted

Index numbers of sales per week (average 1971 prices) 1971 = 100

(Sales in 1971 – £ million Final estimates)	All kinds of business (16 296)	Food shops (6 866)	Non-food shops Total (9 430)	Clothing and footwear shops (2 436)	Durable goods shops (1 897)	Other non-food shops [2] (5 097)
1971	100.0	100.0	100.0	100	100	100
1972	105.3	101.6	107.9	104	113	108
1973	110.3	101.6	116.6	108	127	117
1974	109.0	102.4	113.8	106	122	115
1975	106.7	100.0	111.5	106	119	111
1976	106.5	98.7	112.1	106	122	111
1977	103.6	94.8	110.0	105	119	109
1976						
1st qtr	105.9	99.5	110.6	105	117	111
2nd	106.9	99.6	112.1	106	122	111
3rd	107.3	99.1	113.2	106	125	112
4th	105.9	96.6	112.6	105	124	112
1977						
1st qtr	103.3	94.9	109.3	105	116	109
2nd	102.5	94.7	108.2	101	118	108
3rd	104.3	94.4	111.5	107	121	110
4th	104.4	95.3	111.1	109	121	109
1978						
1st qtr	106.3	96.6	113.3	110	125	111
2nd	108.0	98.1	115.2	110	129	112
1977						
July	104.8	94.3	112.4	107	125	110
August	104.7	94.4	112.3	110	118	111
September [1]	103.5	94.4	110.2	106	121	108
October	102.7	94.2	108.9	103	120	108
November	103.1	93.9	109.8	107	118	108
December [1]	106.9	97.3	113.9	114	125	110
1978						
January	104.9	95.1	112.0	105	129	109
February	106.8	96.8	114.1	109	130	111
March [1]	107.0	97.6	113.8	115	117	112
April	106.7	96.5	114.2	108	132	111
May	108.4	98.9	115.4	113	126	112
June [1]	108.7 r	98.7 r	116.0	110	130	113
July	111.4	98.4	120.9	116	138	117
1978						
February-April	106.8	97.0	114.0	111	126	111
1978						
May-July	109.4	98.7	117.3	113	132	114
Percentage increase	2.4	1.8	2.9	2	5	3

[1] Five-week period. [2] Including department stores and mail-order businesses. r Revised figure

Table 2 Value of retail sales seasonally adjusted

Index numbers of value of sales per week (current prices) 1971 = 100

(Sales in 1971 – £ million Final estimates)	All kinds of business (16 296)	Food shops (6 866)	Non-food shops Total (9 430)	Clothing and footwear shops (2 436)	Durable goods shops (1 897)	Other non-food shops [2] (5 097)
1971	100.0	100.0	100.0	100	100	100
1972	112.0	109.0	114.2	112	118	114
1973	126.9	123.0	129.8	128	136	128
1974	146.7	144.9	148.1	148	144	149
1975	174.4	175.0	174.0	171	168	178
1976	200.1	204.8	196.7	189	187	204
1977	228.0	234.7	223.1	216	206	233
1976						
1st qtr	189.6	193.4	186.8	179	177	194
2nd	196.1	200.3	193.0	187	185	199
3rd	203.4	208.0	200.1	193	190	207
4th	211.4	217.4	207.0	198	197	215
1977						
1st qtr	216.4	223.8	211.0	204	192	222
2nd	222.0	230.4	215.8	204	202	227
3rd	234.2	239.4	230.4	224	213	240
4th	239.4	245.3	235.1	231	219	243
1978						
1st qtr	246.0	249.5	243.5	237	228	252
2nd	254.4	258.5	251.5	243	243	258
1977						
July	231.5	236.6	227.8	220	213	237
August	235.8	239.5	233.0	230	209	243
September [1]	235.0	241.4	230.3	222	217	239
October	234.2	241.7	228.7	218	214	239
November	236.3	242.3	231.9	228	213	241
December [1]	246.0	250.6	242.7	244	227	248
1978						
January	241.0	245.0	238.0	223	233	247
February	246.5	249.4	244.4	235	237	252
March [1]	249.8	253.2	247.3	250	217	257
April	250.3	252.3	248.9	235	250	255
May	255.2	260.0	251.6	250	236	258
June [1]	257.3 r	262.5 r	253.5	245	244	261
July	265.8	265.6	266.0	261	257	272
1978						
February-April	248.9	251.8	246.9	241	233	255
1978						
May-July	259.3	262.7	256.8	251	246	264
Percentage increase	4.2	4.3	4.0	5	5	3

[1] Five-week period. [2] Including department stores and mail-order businesses. r Revised figure.

Hire purchase and other instalment credit business in July

New instalment credit advanced by finance houses and retailers amounted to £458 million in July, after allowing for seasonal factors. Finance houses' lending was lower than in the previous three months, but about the same as in March. Retailers' lending was higher than in recent months. Total advances in the latest three months, May to July, were 7 per cent higher than in the previous three months, February to April. Finance houses' lending increased by 8 per cent between these two three-month periods and retailers' lending by 6 per cent.

The average weekly value of retailers' instalment credit sales in July was higher than in preceding months. In the latest three months, May to July, average sales were 6 per cent higher than in the previous three months. Within this total, durable goods shops' sales increased by 1 per cent, department stores' sales (including those by co-operative societies) increased by 19 per cent and other instalment credit retailers' (mainly mail-order businesses) sales increased by 6 per cent.

The debt outstanding to finance houses and retailers increased by £53 million in July, bringing the total increase in the three months May to July to £241 million, compared to £253 million in February to April. Amounts outstanding to finance houses increased by £201 million and those to retailers by £40 million during the latest three-month period. At the end of July, the total amount outstanding to finance houses and retailers was £3,831 million (not seasonally adjusted), 29 per cent more than a year earlier.

Inquiries: Departments of Trade, Industry, and Prices and Consumer Protection, Economics and Statistics Division 6a, Room 349, Sanctuary Buildings, 20 Great Smith Street, London SW1P 3DB, tel. 01-215 3162.

Table 1 **Hire purchase and other instalment credit business seasonally adjusted** £ million

	Total		Finance houses[1]		Retailers[2]	
	New credit extended	Change in debt	New credit extended	Change in debt	New credit extended	Change in debt
1971	2 036	251	990	165	1 046	86
1972	2 466	438	1 222	296	1 244	142
1973	2 846	444	1 453	332	1 393	112
1974	2 508	−164	1 037	−160	1 471	−4
1975	2 981	−13	1 201	−55	1 780	42
1976	3 586	343	1 535	202	2 051	141
1977	4 392	625	2 072	500	2 320	125
1976						
3rd	913	100	392	56	521	44
4th	968	127	421	83	547	44
1977						
1st qtr	1 007	144	457	89	550	55
2nd	1 047	136	486	118	561	18
3rd	1 149	186	544	148	605	38
4th	1 189	159	585	145	604	14
1978						
1st qtr	1 260	245	626	182	634	63
2nd	1 393	281	716	227	677	54
1977						
August	402	75	199	64	203	11
September	387	60	181	44	206	16
October	378	45	179	39	199	6
November	401	53	198	45	203	8
December	410	61	208	61	202	–
1978						
January	429	85	213	62	216	23
February	418	82	201	57	217	25
March	413	78	212	63	201	15
April	463	93	231	66	232	27
May	471	82	243	74	228	8
June	459	106	242	87	217	19
July	458	53	213	40	245	13
1978						
Feb-Apr	1 294	253	644	186	650	67
May-Jul	1 388	241	698	201	690	40
Percentage increase	7		8		6	

[1] Direct business only: ie excluding agreements block discounted with finance houses by retailers. [2] Durable goods shops, department stores and 'other instalment credit retailers'. For further definitions see footnotes to table 2.

Table 2 **Retailers' instalment credit sales seasonally adjusted**
Index numbers of value of sales per week (current prices) 1971 = 100

	Total[1]	Durable goods shops	Department stores	Other instalments credit retailers[2]
(HP and other instalment credit sales in 1971 £ million[3])	(1130)	(370)	(139)	(621)
1971	100	100	100	100
1972	117	117	106	120
1973	132	119	119	143
1974	139	94	122	169
1975	165	115	143	200
1976	190	136	162	229
1977	217	142	171	272
1976				
3rd	193	136	165	234
4th	200	138	166	244
1977				
1st qtr	205	135	166	256
2nd	210	136	153	266
3rd	227	148	179	284
4th	227	148	184	283
1978				
1st qtr	237	167	183	291
2nd	254	172	199	315
1977				
August	229	144	171	292
September[4]	231	151	194	286
October	224	141	179	282
November	228	147	189	285
December[4]	228	155	183	281
1978				
January	243	180	187	293
February	244	166	189	302
March[4]	228	157	175	281
April	262	185	178	326
May	256	168	196	321
June[4]	246	165	217	300
July	275	178	231	343
1978				
Feb-Apr av.	243	168	180	302
May-Jul av.	258	170	215	320
Percentage Increase	6	1	19	6

[1] Durable good shops, department stores (including co-operative societies) and 'other instalment credit retailers'. [2] General stores (other than department stores) and general mail-order houses. [3] Excluding sales against checks issued by other organisations. [4] The monthly periods for retailers consists of four weeks except those marked [4] which are of five weeks. The period covered by July 1978 sales was the four weeks from 2 July 1978 to 29 July 1978. The corresponding period in 1977 was from 3 July 1977 to 30 July 1977.

Early repayments push reserves down

UK official reserves fell by $330 million during August. Foreign currency borrowing by the public sector under the exchange cover scheme amounted to $33 million and there were repayments – including early repayments – of $212 million. At the end of August the reserves stood at $16,405 million.

Carpet industry sales in May

The daily rate of carpet manufacturer's sales by value in May 1978 at current prices was provisionally estimated to have been 24 per cent more than in May 1977 assuming 21 working days in May 1978 and 22 working days in May 1977. In the three months ended May 1978 the daily rate of manufacturers' sales was provisionally estimated to have been 15 per cent more than in the corresponding period 12 months ago assuming 62 working days in the period ended May 1978 and 64 working days in the period ended May 1977. The index numbers, which are of manufacturers' sales by value, have been adjusted for the length of the working month, but not for non-statutory holidays or other seasonal factors. The wholesale price index of carpets is shown as a guide to the movement in prices.

Inquiries: 01-212 0017.

Index of carpet manufacturers' sales 1970 = 100

	Index of manufacturers' sales at current prices	Wholesale price index
1969	93	96.6
1970	100	100.0
1971	115	104.9
1972	135	111.7
1973	166	130.2
1974	179	153.1
1975	202	177.8
1976	234	211.3
1977	255	249.8
1977		
1st qtr	260	239.3
2nd	239	249.6
3rd	230	252.3
4th	292	257.7
1978		
1st qtr	270	268.5
1977		
January	245	237.3
February	265	239.2
March	269	241.5
April	251	248.3
May	227	250.3
1978		
January	253	265.5
February	268	270.0
March	288	270.0
April	288	270.3
May	281	270.4

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Wool textile industry: output in May

The volume of production in the wool textile industry (as measured by the seasonally-adjusted index of production) in May 1978 was 15 per cent less than in May 1977. Statistics issued by the Wool Industry Bureau of Statistics show that in the period January to May 1978 woven fabrics (excluding blankets) were 7 per cent lower than the period January to May 1977; deliveries of worsted yarns (excluding semi-worsted yarn) were 9 per cent lower. Production of wool and hair tops was 11 per cent less and that of man-made fibre tops was 15 per cent less.

Inquiries: 01-212 0017/6474.

Output in the wool textile industry

	Consumption	Production			Deliveries			
	Raw wool (clean weight)	Tops		Woollen yarn [1]	Worsted yarn [2]	Woven fabrics (excluding blankets) [1]		Blankets [3]
		Wool and hair	Man-made fibres			Woollen	Worsted	
	million kg					million sq m		
1968	177.5	96.6	36.4	147.4	98.2	135.8	110.6	27.3
1969	174.5	92.0	42.2	142.2	100.5	130.1	109.2	26.9
1970	153.1	79.7	44.6	129.4	97.6	115.5	99.8	24.6
1971	141.2	66.2	36.6	130.7	93.0	101.9	83.9	28.5
1972	152.3	75.1	45.9	130.9	101.6	99.8	83.7	28.8
1973	136.6	62.2	55.9	135.2	100.0	104.0	88.4	30.6
1974	112.6	43.9	54.8	122.5	87.2	92.1	82.6	28.1
1975	110.6	46.8	44.4	112.1	75.5	76.8	74.6	24.7
1976	119.7	56.5	47.2	108.0	80.8	73.6	69.4	22.8
1977	113.5	52.3	45.3	105.7	81.2	78.8	71.3	22.2
1976								
1st qtr	31.0	13.8	11.6	29.4	20.6	16.9	18.2	6.5
2nd	30.5	14.5	12.1	27.9	20.3	19.6	16.9	4.4
3rd	27.6	13.4	10.6	23.7	18.2	19.4	16.9	5.2
4th	30.6	14.6	13.0	27.0	21.7	17.9	17.5	6.5
1977								
1st qtr	32.4	15.3	12.6	29.0	23.1	19.6	18.8	6.7
2nd	29.8	13.9	11.9	27.2	20.2	21.1	18.1	4.8
3rd	24.5	11.1	10.4	23.0	17.5	19.7	16.4	4.4
4th	26.8	12.0	10.4	26.5	20.4	18.4	18.0	6.2
1978								
1st qtr	29.5	13.6	10.6	27.7	20.8	18.5	17.3	5.8
1977								
January	10.3	5.0	4.0	9.0	7.2	5.8	5.9	2.4
February	10.2	4.8	4.0	9.1	7.5	6.2	6.0	2.2
March	11.9	5.5	4.6	10.8	8.4	7.6	6.9	2.1
April	9.6	4.6	3.8	8.6	6.4	6.6	5.7	1.7
May	11.1	5.2	4.7	10.0	7.6	7.4	6.6	1.6
June	9.1	4.1	3.4	8.6	6.2	7.1	5.8	1.5
July	7.9	4.2	3.9	6.5	5.6	6.0	5.2	1.1
August	7.6	2.9	2.9	8.4	5.4	6.5	5.2	1.6
September	9.0	4.0	3.6	8.2	6.5	7.2	6.0	1.7
October	9.1	3.9	4.4	9.2	7.1	6.9	6.4	2.0
November	9.7	4.5	3.6	9.5	7.4	6.7	6.5	2.1
December	8.0	3.6	2.4	7.8	5.9	4.8	5.1	2.1
1978								
January	9.7	4.5	3.0	9.3	6.9	6.0	5.8	2.2
February	9.5	4.5	3.1	8.8	6.7	5.9	6.0	1.5
March	10.3	4.6	4.5	9.6	7.2	6.6	5.5	2.1
April	9.7	4.4	3.2	9.2	6.9	6.8	5.5	1.8
May	. .	4.2	4.1	8.8	6.4	6.9	5.4	1.5

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[1] Estimated. [2] From January 1969 includes semi-worsted yarn: previously yarn of this type was not separately distinguished and the small quantities involved were divided between the worsted yarn headings. In May deliveries of semi-worsted yarn were 0.7 million kg. [3] Woven woollen fabrics include fabrics which are mainly woollen by weight of components and, similarly, woven worsted fabrics include fabrics which are mainly worsted by weight of components.

Cotton industry: production in June

Statistics issued by the Textile Statistics Bureau show that in January-June 1978 the amount of cloth woven was 4 per cent lower than in January-June 1977. Production of single yarn decreased by 11 per cent and doubled yarn decreased by 16 per cent.

Inquiries: 01-212 0017/6474.

Production in the cotton industry

Annual totals and weekly averages

	Single yarn [1]		Doubled yarn		Woven cloth	
	Cotton yarn [2]	Spun man-made yarns and mixture yarn, inc. waste	Cotton yarn	Other	Cotton	Man-made fibre and mixtures
	million kg				million m	
1968	171.2	67.5	49.9	52.0	668.2	507.3
1969	166.2	73.2	46.8	60.9	661.5	538.1
1970	158.7	77.4	43.2	57.3	627.6	484.3
1971	133.0	83.3	85.0		559.1	479.8
1972	121.4	81.7	75.4		513.0	469.8
1973	115.4	92.5	82.1		453.2	502.3
1974	101.3	87.7	74.7		409.5	505.3
1975	94.4	76.4	68.4		405.4	503.0
1976	106.9	76.1	69.4		374.5	492.9
1977	98.1	77.6	69.8		368.3	497.5
1977						
Jan	2.2	1.7	1.5		7.7	10.3
Feb	2.3	1.7	1.6		7.9	10.7
Mar [3]	2.2	1.8	1.6		7.9	10.7
Apr	1.7	1.4	1.2		6.3	8.8
May	2.3	1.9	1.6		7.9	11.1
June [3]	1.5	1.2	1.1		6.9	8.8
July	1.6	1.2	1.2		4.3	7.5
August [3]	1.9	1.5	1.4		7.6	9.5
Sep	1.5	1.2	1.2		6.3	9.0
Oct	2.0	1.6	1.4		7.9	10.5
Nov [3]	2.0	1.6	1.4		7.8	10.2
Dec	1.4	1.1	1.0		5.9	7.6
1978						
Jan	2.0	1.5	1.3		7.7	10.0
Feb	2.0	1.6	1.3		8.0	10.0
Mar [3]	1.6	1.2	1.1		6.8	8.2
Apr	2.0	1.6	1.3		8.2	9.4
May [3]	1.8	1.6	1.2		7.5	8.7
Jun	1.4	1.3	1.0		8.2	8.8

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[1] Spun in cotton industry. [2] Including yarns wholly of cotton waste and mixture yarn of cotton and cotton waste. [3] Average of five weeks.

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British Film Fund Agency returns

The British Film Fund Agency has authorised the publication of the following information for the five weeks ended 29 July 1978.

	£
Distributors' earnings submitted	
Low-cost films:	
Eligible (after multiplying by 2½)	18 178
Not eligible for 2½ times rental	76 163
	94 341
High-cost films (including newsreels after multiplying by 2½)	386 458
	480 799
Films under 3000 ft (after multiplying by 2½)	117 574
	598 373
Levy collections paid to agency by HM Customs and Excise to 22 August 1978 approximately covering entertainments for the five weeks ended 29 July 1978	554 158

The ninth interim allocation for the twenty-first year will be at the rate of 55 per cent.

Registrations of British, community and foreign films

The following are details of films registered by the Department of Trade under the Films Acts 1960 to 1970, as amended by the European Communities Act 1972, during the week ended Friday, 1 September 1978.

BR/E indicates that the film is a British quota film, EC that the film is a quota film. The date which forms part of the registration number of each is the date on which quota life of the film expires.

Title of film	Registered no.	Playing time minutes	Date of registration	Registered in the name of	Maker's name
BRITISH					
Iron Men	BR/E 39724/3/9/83	17	30 August	Cinema International Corporation (UK)	Godfrey Davies Productions Ltd
Review No. 1 (32nd Year)	BR/E 39727/3/9/83	10	1 September	Data Film Distributors Ltd	National Coal Board
Movietone News 2569	BR/E 39593/3/9/83	8	1 September	British Movietonews Ltd	British Movietonews Ltd
COMMUNITY					
The Perverse Couple	EC 39725/3/9/83	86	31 August	Cinecenta Film Distributors Ltd	Diana Films, Boulogne
FOREIGN					
Lebanon . . . Why?	F39722	100	29 August	Oppidan Entertainments Ltd	Spot Anta Films Ltd, London
Pete's Dragon	F 39723	106	30 August	Walt Disney Productions Ltd	Walt Disney Productions, California
The Greek Tycoon	F 39726	107	31 August	Cinema International Corporation (UK)	Universal Pictures, California
Lemon Popsicle	F 39728	95	1 September	Entertainment Film Distributors Ltd	Golan-Globus Production, Tel-A-Viv
F.I.S.T.	F 39729	130	1 September	United Artists Corporation Ltd	Chateau Productions Inc, California
Pink Aye	F 39730	6	1 September	United Artists Corporation Ltd	Mirisch-Geoffrey-DF, California

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109	119	129	139	149	159	169	169	189	199	209	219	229	239	249	259	269	279	289	299
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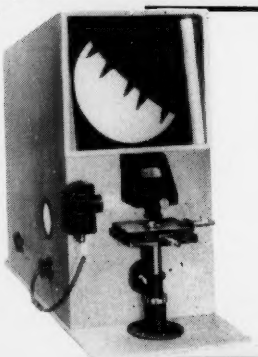

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